Rocky Flats Environmental Technology Site

RECONNAISSANCE LEVEL CHARACTERIZATION REPORT (RLCR)

SECURITY CLUSTER CLOSURE PROJECT

(Buildings 550, 761, 901, 762, 762A, 792, 792A)

REVISION 0

April 10, 2001

Superceded by Rev 1 dated 5/17/01 ptf 10-5-01

1/165

RECONNIAISSANCE LEVEL CHARACTERIZATION REPORT (RLCR)

SECURITY CLUSTER CLOSURE PROJECT
REVISION 0

April 10, 2001

Reviewed by: _____ Date: 4/12/01
Steve Luker, Quality Assurance

Reviewed by: _____ Date: 4-16-01
Joe Mahaffey, Radiological Engineering Manager

Reviewed by: for K. Daniels Date: 4/12/01
Kevin Daniels, RISS ESH&Q Manager

Approved by: _____ Date: 4/17/01
JR Marschall, K-H Project Manager

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ABBREVIATIONS/ACRONYMS

ACM	Asbestos containing material
Be	Beryllium
CDPHE	Colorado Department of Public Health and the Environment
$DCGL_{EMC}$	Derived Concentration Guideline Level – elevated measurement comparison
$DCGL_W$	Derived Concentration Guideline Level – Wilcoxon Rank Sum Test
D&D	Decontamination and Decommissioning
DDCP	Decontamination and Decommissioning Characterization Protocol
DOE	U.S. Department of Energy
DPP	Decommissioning Program Plan
DQA	Data quality assessment
DQOs	Data quality objectives
EPA	U.S. Environmental Protection Agency
FDPM	Facility Disposition Program Manual
HVAC	Heating, ventilation, air conditioning
HSAR	Historical Site Assessment Report
IHSS	Individual Hazardous Substance Site
IWCP	Integrated Work Control Package
K-H	Kaiser-Hill
LBP	Lead-based paint
LLW	Low-level waste
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
NORM	Naturally occurring radioactive material
NRA	Non-Rad-Added Verification
OSHA	Occupational Safety and Health Administration
PARCC	Precision, accuracy, representativeness, comparability and completeness
PCBs	Polychlorinated Biphenyls
PDS	Pre-demolition survey
QC	Quality Control
RCRA	Resource Conservation and Recovery Act
RFCA	Rocky Flats Cleanup Agreement
RFETS	Rocky Flats Environmental Technology Site
RFFO	Rocky Flats Field Office
RLC	Reconnaissance Level Characterization
RLCR	Reconnaissance Level Characterization Report
RSP	Radiological Safety Practices
SVOCs	Semi-volatile organic compounds
TSA	Total surface activity
VOCs	Volatile organic compounds

EXECUTIVE SUMMARY

A Reconnaissance Level Characterization (RLC) was performed to enable facility "Typing" per the DPP (10/8/98) and compliant disposition and waste management of facilities 550, 761, 901, 762, 762A, 792, and 792A (a.k.a. Security Cluster). Because these facilities were anticipated to be Type 1 facilities, the characterization was performed in accordance with the Pre-Demolition Survey Plan (MAN-127-PDSP). All facilities surfaces were characterized in this RLC, including the interior and exterior surfaces of the facilities (i.e., floors (slabs), walls, ceilings and roofs). Environmental media beneath and surrounding the facilities were not within the scope of this RLC Report (RLCR) and will be addressed using the Soil Disturbance Permit process.

The RLC encompassed both radiological and chemical characterization to enable compliant disposition and waste management pursuant to the D&D Characterization Protocol (MAN-077-DDCP). The characterization built upon physical, chemical and radiological hazards identified in the facility specific Historical Site Assessment Reports.

Results indicate that no radiological contamination exists in excess of the prescribed release limits of DOE Order 5400.5. The roof flashing materials of Buildings 762 and 792 contain asbestos, in both friable and non-friable form. Fluorescent light ballasts that may contain PCBs. PCB ballasts and asbestos containing materials will be removed and disposed of in compliance with Environmental Protection Agency (EPA) and Colorado Department of Public Health and Environment (CDPHE) regulations. Painted facility surfaces may contain PCBs. All demolition debris will be managed in compliance with regulations governing PCBs (40 CFR 761), and Environmental Compliance Guidance #27, *Lead-Based Paint (LBP) and Lead-Based Paint Debris Disposal* as applicable.

Based upon this RLCR and subject to concurrence by the Colorado Department of Public Health and Environment (CDPHE), the Security Cluster facilities are considered to be Type 1 facilities. To ensure that the facilities remain free of contamination and that RLC data remain valid, isolation controls will be established, and the facilities will be posted accordingly.

1 INTRODUCTION

A Reconnaissance Level Characterization (RLC) was performed to enable compliant disposition and waste management of facilities 550, 761, 901, 762, 762A, 792, and 792A (a.k.a. Security Cluster). Because these facilities were anticipated to be Type 1 facilities, a PDS characterization was performed. All facilities surfaces were characterized in this RLC include the interior and exterior surfaces of the facilities (i.e., floors (slabs), walls, ceilings and roofs). Environmental media beneath and surrounding the facilities were not within the scope of this RLC Report (RLCR) and will be addressed using the Soil Disturbance Permit process.

As part of the Rocky Flats Environmental Technology Site (RFETS) Closure Project, numerous facilities will be removed. Among these are the Security Cluster facilities. The locations of these facilities are shown in Attachment A. These facilities no longer support the RFETS mission and need to be removed to reduce Site infrastructure, risks and/or operating costs.

Before the facilities can be removed, a Pre-Demolition Survey (PDS) must be conducted; this document presents the PDS results. The PDS was conducted pursuant to the Decontamination and Decommissioning Characterization Protocol (MAN-077-DDCP) and the Pre-Demolition Survey Plan for D&D Facilities (MAN-127-PDSP). The PDS built upon physical, chemical and radiological hazards identified in the facility specific Historical Site Assessment Reports.

1.1 Purpose

The purpose of this report is to communicate and document the results of the RLC effort. PDSs are performed before building demolition to define the final radiological and chemical conditions of a facility. Final conditions are compared with the release limits for radiological and non-radiological contaminants. PDS results will enable project personnel to make final disposition decisions, develop related worker health and safety controls, and estimate waste volumes by waste types.

1.2 Scope

This report presents the final radiological and chemical conditions of the Security Cluster facilities. Environmental media beneath and surrounding the facilities are not within the scope of this RLCR and will be addressed using the Soil Disturbance Permit process. Both facilities and environmental media will be dispositioned pursuant to the Rocky Flats Cleanup Agreement (RFCA).

1.3 Data Quality Objectives

The Data Quality Objectives (DQOs) used in designing this RLC were the same DQOs identified in the Pre-Demolition Survey Plan for D&D Facilities (MAN-127-PDSP). Refer to section 2.0 of MAN-127-PDSP for these DQOs.

2 HISTORICAL SITE ASSESSMENT

Facility specific Historical Site Assessments (HSAs) were conducted to understand facility histories and related hazards. The assessment consisted of facility walkdowns, interviews, and document review, including review of the Historical Release Report (refer to the D&D Characterization Protocol, MAN-077-DDCP). Results were used to identify data gaps and needs, and to develop radiological and chemical characterization packages. Results of the facility specific HSAs were documented in facility specific Historical Site Assessment Reports (HSAR). Refer to the Security Cluster Characterization Project Files for copies of the HSARs. In summary, the HSARs did not identify any known radiological or chemical hazards. Asbestos Containing Material may have been used during construction of the facilities.

3 RADIOLOGICAL CHARACTERIZATION AND HAZARDS

3.1 Radiological Characterization

Radiological characterization was performed to define the nature and extent of radioactive materials that may be present on or in the facilities. Measurements were performed to evaluate the contaminants of concern. Based on facility history, building walkdowns, and MARSSIM guidance, the facilities were broken down into survey areas, survey units, and classifications. A Radiological Characterization Package (refer to Attachment B) was developed during the planning phase that describes how the facilities were broken-down into survey units, the justification for the survey unit classifications, and the minimum sampling requirements per survey unit.

Radiological survey unit packages were developed for each survey unit in accordance with Radiological Safety Practices (RSP) 16.01, "Radiological Survey/Sampling Package Design, Preparation, Control, Implementation and Closure." Total Surface Activity (TSA), removable and scan measurements were collected in accordance with RSP 16.02 "Radiological Surveys of Surfaces and Structures." Radiological survey data were verified, validated and evaluated in accordance with RSP 16.04, "Radiological Survey/Sample Data Analysis." Quality Control measures were implemented thorough the survey and sampling process in accordance with RSP 16.05, "Radiological Survey/Sample Quality Control."

Radiological data, statistical analysis results, and survey locations are presented in Attachment D, Radiological Data Summaries and Survey Maps. Radiological survey packages are maintained in the Security Cluster Characterization Project files.

3.2 Radiological Hazards Summary

The RLC (serving also as the Pre-Demolition Survey) confirmed that the Security Cluster facilities (i.e., all interior and exterior facility surfaces) do not contain radiological contamination above the surface contamination guidelines provided in DOE Order 5400.5 and the RFETS Radiological Control Manual. Isolation control postings are displayed at all entrances to the Security Cluster facilities to ensure no radioactive materials are introduced.

4 CHEMICAL CHARACTERIZATION AND HAZARDS

4.1 Chemical Characterization

Chemical characterization was performed to determine the nature and extent of chemical contamination that may be present on or in the Security Cluster facilities. Based upon a review of historical and process knowledge, visual inspections, and PDSP DQOs, additional sampling needs were determined. A Chemical Characterization Package (refer to Attachment C) was developed during the planning phase that describes sampling requirements and the justification for the sample locations and estimated sample numbers. Contaminants of concern included asbestos and beryllium. Refer to Attachment E, Chemical Summary Data and Sample Maps, for details on sample results and sample locations.

4.1.1 Asbestos

Based on limited historical asbestos inspection data, an asbestos inspection and sampling of suspect asbestos containing material (ACM) was required for PDS. A CDPHE-certified asbestos inspector conducted the inspection and sampling in accordance with PRO-563-ACPR *Asbestos Characterization Protocol,* Revision 0. Potential ACM was identified for sampling at the discretion of the inspector.

Portals 762 and 792 are identical in construction and built at the same time. Samples collected in Portal 792 are considered representative of materials in Portal 762 and vice versa.

4.1.2 Beryllium

Based on the HSAR, there was no record of beryllium operations in the facilities, nor was there adequate information to conclude the absence of beryllium in the facilities, therefore limited biased sampling was performed in each facility.

4.1.3 RCRA/CERCLA Constituents [including metals and volatile and semi-volatile organic compounds (VOCs & SVOCs)]

Based on the HSAR, there was no record of RCRA/CERCLA constituent operations or storage in the Security Cluster, therefore RCRA/CERCLA constituent sampling was not performed.

Sampling for lead in paint in the Security Cluster was not required. Environmental Waste Compliance Guidance #27, *Lead-based Paint (LBP) and Lead-based paint Debris Disposal*, states that LBP debris generated outside of currently identified high contamination areas shall be managed as non-hazardous (solid) wastes, and additional analysis for characteristics of hazardous waste derived from LBP is not a requirement for disposal.

4.1.4 Polychlorinated Biphenyls (PCBs)

Based on the HSAR, there was no record of PCB operations or storage in the Security Cluster, therefore PCB sampling was not performed. The Security Cluster facilities contain fluorescent light ballasts that may contain PCBs. Therefore, fluorescent light

fixtures will be inspected to identify PCB ballasts during removal operations. PCB ballasts will be identified based on factors such as labeling (e.g., PCB-containing and non-PCB-containing), manufacturer, and date of manufacturing. All ballasts that do not indicate non-PCB-containing are assumed to be PCB-containing.

Historical data and process knowledge give no reason to suspect that any specialized paints or coatings containing PCBs were applied to any of the painted surfaces within the Security Cluster facilities. However, Environmental Waste Compliance Guidance #25, *Management of Polychlorinated Biphenyls (PCBs) in Paint and Other Bulk Product Waste During Facility Disposition*, has directed that applied dried paints, varnishes, waxes, or other similar coatings or sealants are acceptable for disposal (with notification) in a non-hazardous solid waste landfill as PCB Bulk Product Waste under 40 CFR 761.3 and 40 CFR 761.62 paragraph (b), and therefore, need not be sampled as long as restrictions outlined in 40 CFR 761.62 regarding their disposition are met. Current plans are to dispose of demolition debris from the Security Cluster in an off-site, non-hazardous solid waste landfill as PCB Bulk Product Waste.

4.2 Chemical Hazards Summary

Each facility was sampled for the presence of asbestos-containing material (ACM) and beryllium.

4.2.1 Asbestos

The only area found to contain ACM was the roof flashing material of Buildings 762 and 792, in both friable and non-friable form. The asbestos containing felt in the roof flashing material is not tar impregnated and is considered friable. Asbestos containing materials will be removed and disposed of in compliance with Environmental Protection Agency (EPA) and Colorado Department of Public Health and Environment (CDPHE) regulations. Asbestos sample data and sample location maps are contained in Attachment E, Chemical Summary Data and Sample Maps. Estimated quantities of ACM are presented in Attachment F, Decommissioning Waste Types and Volume Estimates.

4.2.2 Beryllium

Beryllium sample results of the Security Cluster facilities were all less than 0.1 $\mu g/100cm^2$. Beryllium sample data and sample location maps are contained in Attachment E, Chemical Summary Data and Sample Maps.

4.2.3 RCRA/CERCLA Constituents

Based on the HSAR, there was no record of RCRA/CERCLA constituent operations or storage in the Security Cluster, therefore RCRA/CERCLA constituents do not present a chemical hazards in the Security Cluster.

4.2.4 PCBs

PCB ballasts may be found in the Security Cluster and will be removed and disposed of in accordance with site procedures prior to building demolition. It is not suspected that

any specialized paints or coatings containing PCBs were applied to painted surfaces within the Security Cluster facilities, however, plans are to dispose of demolition debris in an off-site, non-hazardous solid waste landfill as PCB Bulk Product Waste.

5 PHYSICAL HAZARDS

Physical hazards associated with the Security Cluster facilities consist of those common to standard industrial environments and include hazards associated with energized systems, utilities, and trips and falls. There are no unique hazards associated with the facilities. The facilities have been relatively well maintained and are in good physical condition, and therefore, do not present hazards associated with building deterioration. Physical hazards are controlled by the Site Occupational Safety and Industrial Hygiene Program, which is based on OSHA regulations, DOE orders, and standard industry practices.

6 DATA QUALITY ASSESSMENT

Data used in making management decisions for decommissioning of the Security Cluster, and consequent waste management, are of adequate quality to support the decisions documented in this report. The data presented in this report (Attachments A – G) were verified and validated relative to DOE quality requirements, applicable EPA guidance, and original DQOs of the project.

Adequate data quality for decision-making is required by the Kaiser-Hill Team Quality Assurance Program (K-H, 1997, §7.1.4 and 7.2.2), the DOE (Order O 414.1, Quality Assurance, §4.b.(2)(b)), and the Regulators (EPA Region VIII and the CDPHE). The data and consequent environmental decisions must be technically and legally defensible. Verification and validation (V&V) of the data, in concert with the DQO process, ensure that data used in decisions resulting from the PDS are usable and defensible.

V&V of the data are the primary components of the DQA, and are detailed in the Security Cluster Characterization Project File under the file header "DQA". A summary of the decisions and uncertainties resulting from the DQO process specific to this project are displayed in Attachment G, Table G-1. DQA for radiological data drew heavily from guidance provided in the MARSSIM (NUREG-1575), as displayed in Attachment G, Table G-2, and Radiological Safety Practices (RSPs) 16.04 and 16.05. V&V of non-radiological data drew from a number of requirements and guidance documents, including EPA QA/G-4 (EPA, 1994) and QA/G-9 (EPA, 1998). Other applicable guidance and requirements documents are referenced within the Security Cluster Characterization Project Files.

In summary, the V&V process corroborates that the following elements of the characterization process are adequate:

- the *number* of samples and surveys;
- the *types* of samples and surveys;
- the sampling/survey process, in the field; and,
- the laboratory analytical process, relative to accuracy and precision considerations.

7 DECOMMISSIONING WASTE TYPES AND VOLUME ESTIMATES

The demolition and disposal of the Security Cluster will generate a variety of wastes. Attachment F presents the estimated waste volumes and waste type by facility. All wastes can be disposed of as sanitary waste, except asbestos containing material and PCB Bulk Product Waste. There is no radioactive or hazardous waste. Asbestos and PCB ballasts will be managed pursuant to Site asbestos and PCB abatement and waste management procedures.

8 FACILITY CLASSIFICATION AND CONCLUSIONS

Based on the analysis of radiological, chemical and physical hazards, the Security Cluster facilities (i.e., 550, 761, 901, 762, 762A, 792, and 792A) are classified as RFCA Type 1 facilities pursuant to the RFETS Decommissioning Program Plan (DPP; K-H, 1999). The Type 1 classification is based on a review of historical and process knowledge, and newly acquired RLC data, and will be subject to concurrence by the Colorado Department of Public Health and the Environment (CDPHE).

The RLC of the Security Cluster was performed in accordance with the DDCP and PDSP; all PDSP DQOs were met, and all data satisfied the PDSP DQA criteria. These facilities do not contain radiological or hazardous wastes. All demolition debris will be managed in compliance with regulations governing PCBs (40 CFR 761), as applicable, in accordance with the Decommissioning Program Plan, Section 3.3.5. PCB ballasts and asbestos containing material will be removed and disposed of in compliance with EPA and CDPHE regulations. Environmental media beneath and surrounding the facilities will be addressed using the Soil Disturbance Permit process.

To ensure that the Type 1 facilities remain free of contamination and that RLC data remain valid, isolation controls have been established, and the facilities are posted accordingly.

11

9 REFERENCES

ANSI-N323A-1997, Radiation Protection Instrumentation Test and Calibration.

DOE/RFFO, CDPHE, EPA, 1996. Rocky Flats Cleanup Agreement (RFCA), July 19, 1996.

DOE Order 5400.5, "Radiation Protection of the Public and the Environment."

DOE Order 414.1A, "Quality Assurance."

EPA, 1994. "The Data Quality Objective Process," EPA QA/G-4.

K-H, 1997. "Kaiser-Hill Team Quality Assurance Program", Rev. 5, December, 1997.

K-H, 1998. Facility Disposition Program Manual, MAN-076-FDPM, Rev. 1, September 1999.

K-H, 1999. Decontamination and Decommissioning Characterization Protocol, MAN-077-DDCP, Rev. 1, June 19, 2000.

K-H, 1999. Decommissioning Program Plan, June 21, 1999.

K-H, 2000. Pre-Demolition Survey Plan, MAN-127-PDSP, Rev. 0, March 26, 2001.

MARSSIM - Multi-Agency Radiation Survey and Site Investigation Manual, December 1997 (NUREG-1575, EPA 402-R-97-016).

PRO-475-RSP-16.01, Radiological Survey/Sampling Package Design, Preparation, Control, Implementation, and Closure, September 30, 1999.

PRO-476-RSP-16.02, Radiological Surveys of Surfaces and Structures, September 30, 1999.

PRO-477-RSP-16.03, Radiological Samples of Building Media, September 30, 1999.

PRO-478-RSP-16.04, Radiological Survey/Sample Data Analysis, September 30,1999.

PRO-479-RSP-16.05, Radiological Survey/Sample Quality Control, September, 30, 1999

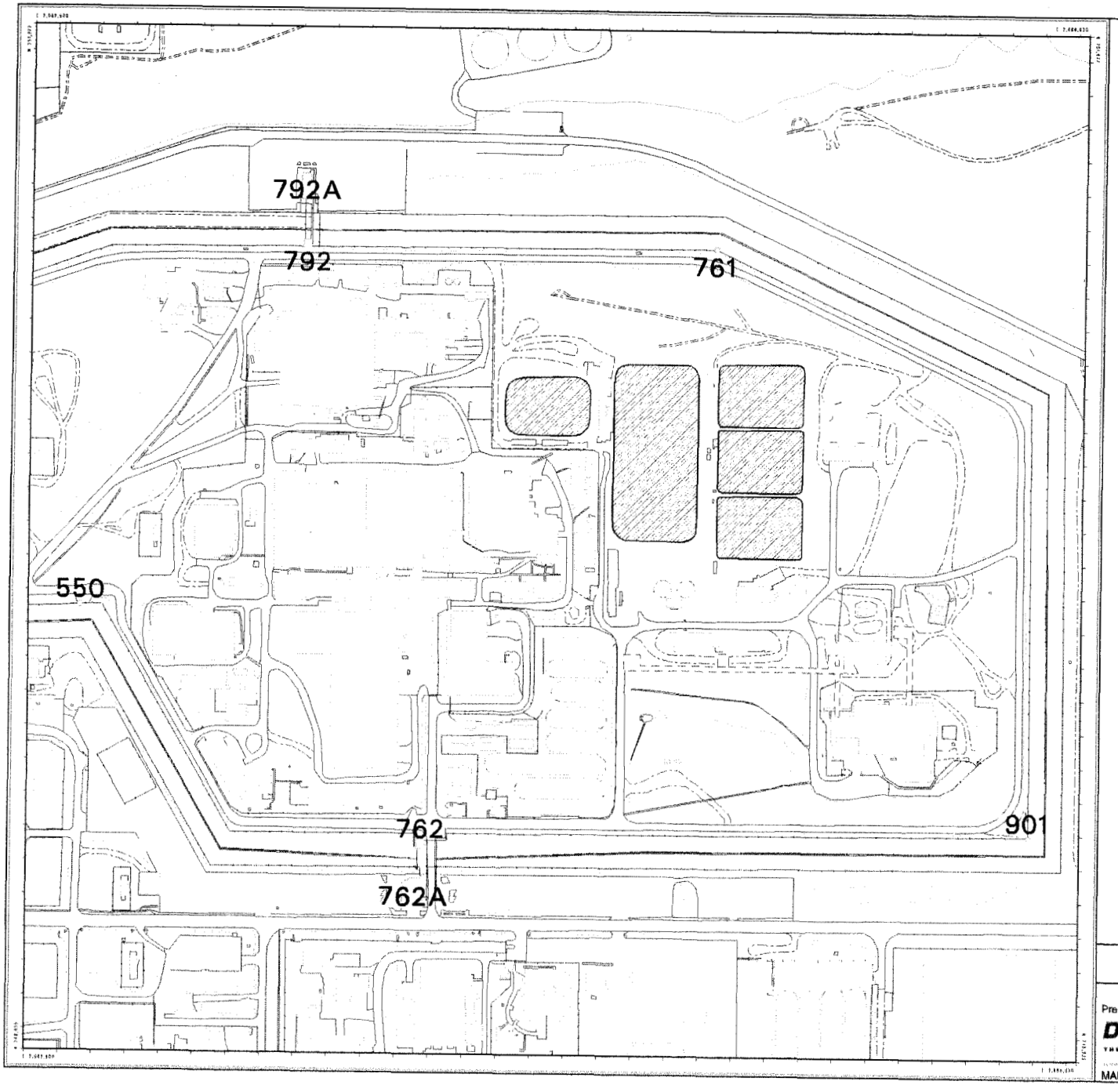
RFETS, Environmental Waste Compliance Guidance #25, Management of Polychlorinated Biphenyls (PCBs) in Paint and Other Bulk Product Waste During Facility Disposition.

RFETS, Environmental Waste Compliance Guidance #27, Lead-Based Paint (LBP) and Lead-Based Paint Debris Disposal.

RFETS, Historical Site Assessment Reports for Buildings 762, 762A, 792, 792A, 550, 761, and 901.

ATTACHMENT A

Facility Location Map



Security Cluster Area

EXPLANATION

Security Cluster Buildings

Standard Map Features

- Buildings and other structures
- Solar Evaporation Ponds (SEP)
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences and other barriers
- Paved roads
- Dirt roads

DATA SOURCE BASE FEATURES:
Buildings, fences, hydrography, roads and other structures from 1994 aerial photography data captured by EG&G RSI, Las Vegas.
Digitized from the orthophographs, 1995

Scale = 1 : 5370
1 inch represents approximately 448 feet

100 0 200 400ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

GIS Dept. 303-966-7707

Prepared by:
DynCorp
THE ART OF TECHNOLOGY

Prepared for:
KAISER-HILL COMPANY

MAP ID: 01-0231

March 15, 2001

NT_Svr c:/projects/fy2001/01-0231/security_cluster.aml

ATTACHMENT B

Radiological Characterization Package

Rocky Flats Environmental Technology Site

RADIOLOGICAL CHARACTERIZATION PACKAGE

SECURITY CLUSTER CLOSURE PROJECT

REVISION 0

March 1, 2001

Prepared by: Jay M. Britten / Jay M Britten 2/27/01.
Radiological Engineer

Reviewed by: Duane Parsons / Duane Parsons 2/27/01.
RISS Facility Characterization Coordinator

Reviewed by: Steve Luker / Steve Luker 3/1/01.
Quality Assurance

Approved by: Vern Guthrie / Vern Guthrie 3/1/01.
Closure Project Facility Manager

Radiological Characterization Package
Security Cluster (B762, B762A, B792, B792A, 550, 761, and 901)

Building:	Security Cluster	Last Updated:	Date:	2/28/01	Time:	800	Initials:	JMB

* This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols(07/26/00), and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities (02/14/01).
* PDSP Data Quality Objectives were used to develop this characterization package.

Instructions:

1. Verify characterization activities are on the Plan-of-the-Day (POD).
2. Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual.
3. Verify personnel have appropriate training for the applicable tasks they will be performing.
4. Comply with RWP requirements, if applicable.
5. Comply with JHA and facility PPE requirements, as applicable.
6. Inform the Facility Manager, or designee prior to starting characterization activities.
7. Follow applicable characterization and sampling procedures.
8. Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs.
9. Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal.
10. Collect and maintain all characterization paperwork in the Project File(s).
11. All radiological surveys shall be conducted in accordance with the sampling and instruction forms included in Security Cluster Package Identification numbers 01-0006, 01-0007, and 01-0008. Sample locations are denoted on scaled maps attached to each survey package.

Class 1 Areas

Survey Area	Survey Unit	Class	Description	Total m^2	Floor m^2	Scan m^2	TSA	Smears	Media	Class Justification
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Class 1 Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification.
			Class 1 Totals	0	0	0	0	0	0	

Radiological Characterization Package
Security Cluster (B762, B762A, B792, B792A, 550, 761, and 901)

Class 2 Areas

Survey Area	Survey Unit	Class	Description	Total m^2	Floor m^2	Scan m^2	TSA	Smears	Media	Class Justification
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Class 2 Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification.
			Class 2 Totals	0	0	0	0	0	0	

Radiological Characterization Package
Security Cluster (B762, B762A, B792, B792A, 550, 761, and 901)

Class 3 Areas

Survey Area	Survey Unit	Class	Description	Total m^2	Floor m^2	Scan m^2	TSA	Smears	Media	Class Justification
A	SEC-A-001	3	Interior of B762, B762A, B792, and B792A	1820	516	182	**15-random 45-biased** Fifteen total sample points per building interior	**15-random 45-biased** Fifteen total sample points per building interior	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. *Historical Site Assessment and process* knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 10% scan will be biased towards areas of greater potential for contamination (e.g., floors and lower walls). Additional biased measurements have been prescibed and will be collected to ensure all building surfaces are adequately characterized. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.
A	SEC-A-002	3	Interiors of B550, B761, and B901 [1st Floor - Walls, Floor, Ceiling] [2nd Floor - Walls, Floor, & Ceiling] [3rd Floor - Walls, Floor, & Ceiling]	661	86	67	**15-random 30-biased** Fifteen total sample points per building interior	**15-random 30-biased** Fifteen total sample points per building interior	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 10% scan will be biased towards areas of greater potential for contamination (e.g., floors and lower walls). Additional biased measurements have been prescibed and will be collected to ensure all building surfaces are adequately characterized. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.
B	SEC-B-003	3	Exterior of B762, B762A, B792, and B792A [including roof], **AND** Exterior of B550, B761, B901 [including roof]	2613	137	262	**15-random 90-biased** 15 total sample points per building exterior	**15-random 90-biased** 15 total sample points per building exterior	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. Historical Site Assessment of this unit provides a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 10% scan will be biased towards areas of greater potential for contamination (e.g., lower walls & roof areas). Additional biased measurements have been prescibed and will be collected to ensure all building surfaces are adequately characterized. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.
			Class 3 Totals	**5094**	**739**	**511**	**210**	**210**	**0**	
All Class Areas			**All Class Totals**	**5094**	**739**	**511**	**210**	**210**	**0**	

* Larger numbers of biased TSA and Removable sample locations provided to adequately characterize facility surfaces.

Radiological Characterization Package
Security Cluster (B762, B762A, B792, B792A, 550, 761, and 901)

Non-Impacted Areas

Survey Area	Survey Unit	Class	Description	Total m^2	Floor m^2	Scan m^2	TSA	Smears	Media	Class Justification
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Non-Impacted Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification.
			Non-Impacted Totals	0	0	0	0	0	0	

ATTACHMENT C

Chemical Characterization Package

Rocky Flats Environmental Technology Site

CHEMICAL CHARACTERIZATION PACKAGE

SECURITY BUILDING CLUSTER CLOSURE PROJECT

REVISION 1

February 20, 2001

Prepared by: _____
Industrial Hygiene

Prepared by: _____
Environmental Compliance

Reviewed by: _____
Quality Assurance

Reviewed by: _____ 2/21/01
RISS Facility Characterization Coordinator

Approved by: _____ 2/23/01
Closure Project Facility Manager

CHEMICAL CHARACTERIZATION PACKAGE

BUILDING(s): SECURITY CLUSTER (550, 761, 901, 762, 762A, 792, 792A)

* This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols, and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities.
* PDSP Data Quality Objectives were used to develop this characterization package.

Instructions:

1. Verify characterization activities are on the Plan-of-the-Day (POD).
2. Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual.
3. Verify personnel have appropriate training for the applicable tasks they will be performing.
4. Comply with RWP requirements, if applicable.
5. Comply with JHA and facility PPE requirements, as applicable.
6. Inform the Facility Manager, or designee prior to starting characterization activities.
7. Follow applicable characterization and sampling procedures.
8. Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs.
9. Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal.
10. Collect and maintain all characterization paperwork in the Project File(s), and all electronic data in the appropriate D&D RISS subdirectory.

ASBESTOS		
Sample Location	**Estimated Number of Samples**	**Sample location and justification/rational**
550, 761 & 901	10 per building	Asbestos inspections have not been performed. As a result, a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure. Suspect materials include drywall, base cove, floor insulation and roof.
762 & 792	11 per building	Asbestos inspections have not been performed. As a result, a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure. Suspect materials include window caulking, roof and flashing, ceiling tile, floor tile, base cove and drywall.
762A & 792A	24 per building	Asbestos inspections have not been performed. As a result, a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure. Suspect materials include ceiling tile, drywall, base cove, roof and flashing, pipe insulation, linoleum, exterior soffit texture, transite, window caulking.
Total Samples:	100	The exact sample numbers and locations will not be determined until a comprehensive, invasive inspection is performed in accordance with 40 CFR Part 763, Subpart E. Sample locations will be specified on sample maps during characterization efforts. Samples will be obtained in accordance with PRO-653-ACPR, Asbestos Characterization Procedure and 40 CFR 763.

BERYLLIUM		
Sample Location	**Number of Samples (smears)**	**Sample location and justification/rational**
550, 761, 901, 762, 762A, 792, 792A	14 – biased	There is no documented supporting data or process history that proves beryllium was not used or stored in these buildings. Therefore, two biased

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		samples from each of the seven building will be obtained. Buildings have similar history and can be treated as one area.
Total Samples:	14	Samples will be obtained at locations specified on sample map(s) in accordance with PRO-536-BCPR, Beryllium Characterization Procedure. Biased sample locations will correspond with the most probable areas of dust accumulation (including beryllium dust), assuming airborne deposition.

LEAD		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
Security Cluster, all locations	0	Lead sampling is not required for Security Cluster buildings. All paint will remain a part of the infrastructure during demolition and therefore does not require sampling per Environmental Waste Compliance Guidance No. 27, Lead Based Paint (LBP) and LBP Debris Disposal. In addition, these buildings were constructed in 1982, 1983, and 1989, and lead based paint is not probable. Sampling for lead for IH requirements will be at the discretion of the demolition contractor.
Total Samples:	0	

RCRA/CERCLA CONSTITIUENTS		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
Security Cluster	0	No hazardous activities that may have resulted in RCRA or CERCLA constituents occurred in the Security Cluster buildings, therefore sampling for RCRA/CERCLA constituents is not required. **Note: These buildings do contain materials that may need to be managed as Regulated Waste during D&D activities including mercury thermostats, fluorescent light bulbs, circuit boards, and HVAC systems. Care will need to be taken to ensure these wastes are managed properly.**
Total Samples:	0	

PCBs		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
Security Cluster	0	The Security Cluster buildings were constructed in 1982, 1983, and 1989. PCB contamination in the structural debris is not probable. No sampling is required. **Note: These buildings do contain materials that may need to be managed as Regulated Waste during D&D activities, such as light ballasts. Care will need to be taken to ensure these wastes are managed properly.**
Total Samples:	0	

* PCB ballasts, fluorescent light bulbs, potential mercury switches in thermostats, and mercury vapor light bulbs shall be removed prior to demolition.

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ATTACHMENT D

Radiological Data Summaries and Survey Maps

SURVEY UNIT DATA SUMMARY: SEC-A-001

Survey Unit Descripton:
Interior of 762, 762A, 792 and 792A

Survey Unit SEC-A-001 Data Summary

Total Surface Activity Measurements

	60	60	
	Number Required	Number Obtained	
MIN	-11.7		dpm/100 cm^2
MAX	26.4		dpm/100 cm^2
MEAN	0.9		dpm/100 cm^2
STD DEV	8.3		dpm/100 cm^2
TRANSURANIC DCGL$_W$	100		dpm/100 cm^2

Removable Activity Measurements

	60	60	
	Number Required	Number Obtained	
MIN	-0.9		dpm/100 cm^2
MAX	9.1		dpm/100 cm^2
MEAN	1.2		dpm/100 cm^2
STD DEV	2.2		dpm/100 cm^2
TRANSURANIC DCGL$_W$	20		dpm/100 cm^2

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Survey Unit SEC-A-001 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	8	11	12	19	34	35
Serial #:	3114	1546	1546	1366	3114	1241	1546
Cal Due Date:	5/6/01	5/3/01	5/3/01	5/6/01	5/6/01	8/26/01	5/3/01
Analysis Date:	3/26/01	3/26/01	3/27/01	3/27/01	3/27/01	3/29/01	3/29/01
Alpha Eff. (c/d):	0.22	0.228	0.228	0.204	0.22	0.214	0.228
Alpha Bkgd (cpm)	2.0	2.0	0.7	0.7	0.0	0.7	1.3
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	33.5	32.3	22.7	25.4	9.1	24.2	27.8

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
1	11	2.7	2.0	-2.5
2	11	3.3	3.3	0.1
3	35	2.0	0.7	-5.6
4	11	9.3	2.7	26.4
5	35	2.0	0.7	-5.6
6	12	2.7	3.4	-2.8
7	11	2.7	2.0	-2.5
8	35	4.0	2.7	3.2
9	11	4.7	2.0	6.3
10	35	6.0	4.0	12.0
11	11	2.7	4.7	-2.5
12	35	2.0	2.7	-5.6
13	35	1.3	3.3	-8.7
14	12	3.3	2.7	0.1
15	12	2.0	1.3	-6.2
16	35	2.7	2.0	-2.5
17	35	1.3	2.0	-8.7
18	7	4.7	4.0	6.5
19	8	2.7	0.7	-2.5
20	19	0.7	4.7	-11.7
21	11	0.7	1.3	-11.3
22	11	3.3	4.0	0.1
23	19	4.7	4.0	6.5
24	35	2.0	5.3	-5.6
25	35	4.7	0.7	6.3
26	35	1.3	2.0	-8.7
27	35	2.7	2.0	-2.5
28	35	2.7	5.3	-2.5
29	35	1.3	2.7	-8.7
30	35	2.7	1.3	-2.5
31	7	1.3	4.7	-9.0
32	7	4.0	4.7	3.3
33	8	7.3	2.7	17.7
34	8	3.4	3.3	0.6
35	8	0.7	3.3	-11.3
36	8	2.0	1.3	-5.6
37	7	6.7	3.3	15.6
38	7	3.3	8.0	0.1
39	7	0.7	7.3	-11.7
40	8	3.3	1.3	0.1
41	8	3.3	0.7	0.1
42	7	4.7	4.0	6.5
43	7	5.3	7.3	9.2
44	11	2.7	2.0	-2.5
45	19	6.0	7.3	12.4
46	11	2.7	0.7	-2.5
47	19	5.7	4.3	11.0

Survey Unit SEC-A-001 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	8	11	12	19	34	35
Serial #:	3114	1546	1546	1366	3114	1241	1546
Cal Due Date:	5/6/01	5/3/01	5/3/01	5/6/01	5/6/01	8/26/01	5/3/01
Analysis Date:	3/26/01	3/26/01	3/27/01	3/27/01	3/27/01	3/29/01	3/29/01
Alpha Eff. (c/d):	0.22	0.228	0.228	0.204	0.22	0.214	0.228
Alpha Bkgd (cpm)	2.0	2.0	0.7	0.7	0.0	0.7	1.3
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	33.5	32.3	22.7	25.4	9.1	24.2	27.8

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
48	19	4.0	4.7	3.3
49	12	3.4	5.4	0.6
50	11	8.0	3.3	20.7
51	11	2.7	2.0	-2.5
52	11	2.7	0.7	-2.5
53	11	4.0	3.3	3.2
54	11	4.7	3.3	6.3
55	19	4.7	7.0	6.5
56	19	4.0	5.3	3.3
57	19	1.3	0.7	-9.0
58	19	6.0	3.3	12.4
59	19	4.7	6.3	6.5
60	19	6.0	4.7	12.4
			Average LAB	3.3
			MIN	-11.7
			MAX	**26.4**
			MEAN	**0.9**
			SD	8.3
			Transuranic DCGL$_W$	**100**

QC DATA

QC-2	7	7.3	6.0	18.3
QC-3	12	4.7	1.3	7.0
QC-10	34	0.7	2.0	-12.0
			Average LAB	3.1
			MIN	-12.0
			MAX	**18.3**
			MEAN	**4.4**
			SD	15.3
			Transuranic DCGL$_W$	**100**

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Survey Unit SEC-A-001 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4	13	14	15	16	25
Serial #:	830	833	1157	770	830	833	1157	770	1157
Cal Due Date:	8/12/01	7/23/01	8/27/01	7/18/01	8/12/01	7/23/01	8/27/01	7/18/01	8/27/01
Analysis Date:	3/28/01	3/28/01	3/28/01	3/28/01	3/29/01	3/29/01	3/29/01	3/29/01	3/26/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0	0	0	0.3	0.0	0.0	0.0	0.1	0.1
Sample Time (min)	2	2	2	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10	10	10	10
MDC (dpm/100cm^2)	4.5	4.5	4.5	8.8	4.5	4.5	4.5	7.0	7.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	3	0.0	0.0
2	3	0.0	0.0
3	13	0.0	0.0
4	3	1.0	3.0
5	16	1.0	2.7
6	4	0.0	-0.9
7	2	0.0	0.0
8	15	0.0	0.0
9	2	2.0	6.1
10	14	1.0	3.0
11	1	0.0	0.0
12	15	0.0	0.0
13	16	1.0	2.7
14	2	1.0	3.0
15	1	0.0	0.0
16	13	0.0	0.0
17	14	0.0	0.0
18	15	3.0	9.1
19	16	2.0	5.8
20	4	0.0	-0.9
21	2	0.0	0.0
22	4	0.0	-0.9
23	2	1.0	3.0
24	15	0.0	0.0
25	15	1.0	3.0
26	16	0.0	-0.3
27	13	2.0	6.1
28	13	0.0	0.0
29	14	0.0	0.0
30	13	1.0	3.0
31	15	1.0	3.0
32	25	0.0	-0.3
33	25	0.0	-0.3
34	16	1.0	2.7
35	25	0.0	-0.3
36	16	2.0	5.8
37	13	0.0	0.0
38	15	1.0	3.0
39	14	0.0	0.0
40	25	0.0	-0.3
41	16	1.0	2.7
42	15	0.0	0.0

Survey Unit SEC-A-001 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4	13	14	15	16	25
Serial #:	830	833	1157	**770**	830	833	1157	770	1157
Cal Due Date:	8/12/01	7/23/01	8/27/01	**7/18/01**	8/12/01	7/23/01	8/27/01	7/18/01	8/27/01
Analysis Date:	3/28/01	3/28/01	3/28/01	**3/28/01**	3/29/01	3/29/01	3/29/01	3/29/01	3/26/01
Alpha Eff. (c/d):	0.33	0.33	0.33	**0.33**	0.33	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0	0	0	**0.3**	0.0	0.0	0.0	0.1	0.1
Sample Time (min)	2	2	2	**2**	2	2	2	2	2
Bkgd Time (min)	10	10	10	**10**	10	10	10	10	10
MDC (dpm/100cm^2)	4.5	4.5	4.5	**8.8**	4.5	4.5	4.5	7.0	7.0

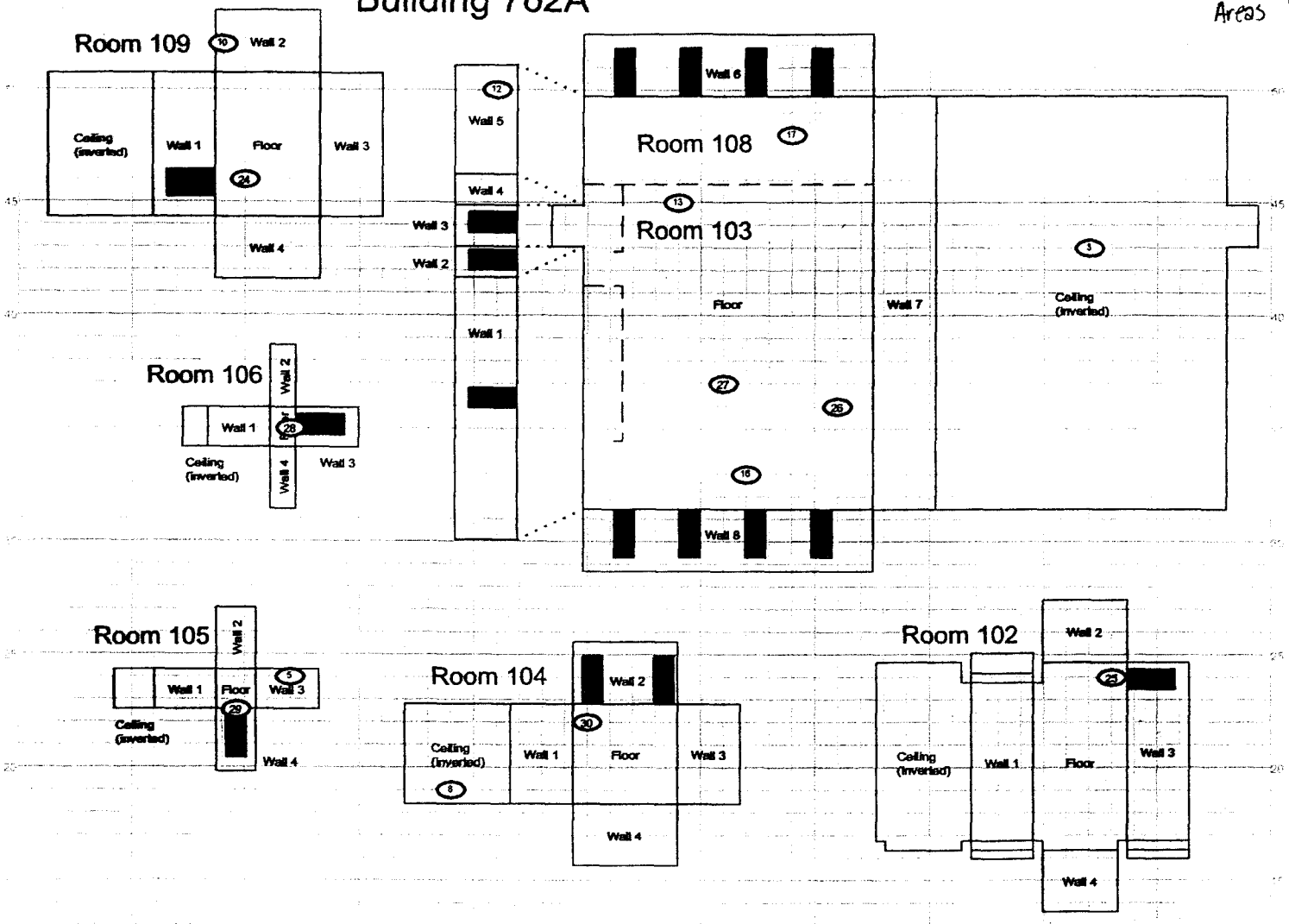
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
43	25	0.0	-0.3
44	4	0.0	-0.9
45	1	0.0	0.0
46	2	0.0	0.0
47	1	1.0	3.0
48	2	0.0	0.0
49	3	0.0	0.0
50	1	0.0	0.0
51	3	0.0	0.0
52	1	0.0	0.0
53	1	0.0	0.0
54	4	1.0	2.1
55	3	0.0	0.0
56	2	0.0	0.0
57	1	1.0	3.0
58	4	0.0	-0.9
59	3	0.0	0.0
60	2	0.0	0.0
		MIN	-0.9
		MAX	**9.1**
		MEAN	1.2
		SD	2.2
		Transuranic $DCGL_W$	**20**

[illegible]-DEMOLITION SURVEY FOR SECURITY CLU[illegible]R

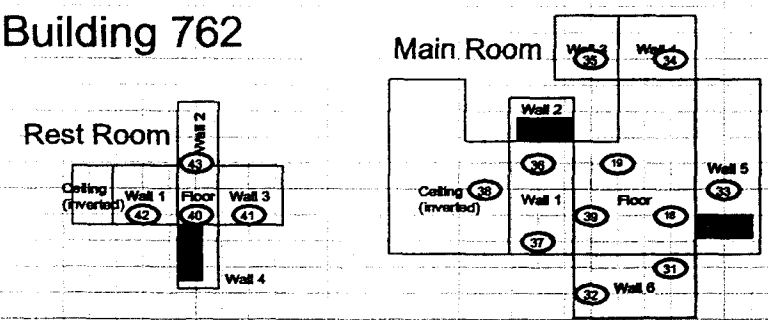
Survey Area: A **Survey Unit: SEC-A-001** **Classification: 3**
Building: 762, 762A, 792, 792A
Survey Unit Description: Interiors
Total Area: 1820 sq. m. **Total Floor Area: 516 sq. m.**

→ Scan Survey Areas

Building 762A



Building 762



SURVEY MAP LEGEND
- Sensor & TSA Location
- Sensor, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7787 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: h:\2001\01-0231 March 8, 2001

Scan Survey Information
Survey Instrument ID #(s): 9,10,11,20,21,22
RCT ID #(s): 2,5,8

SEC-A-001

31,32,33,34

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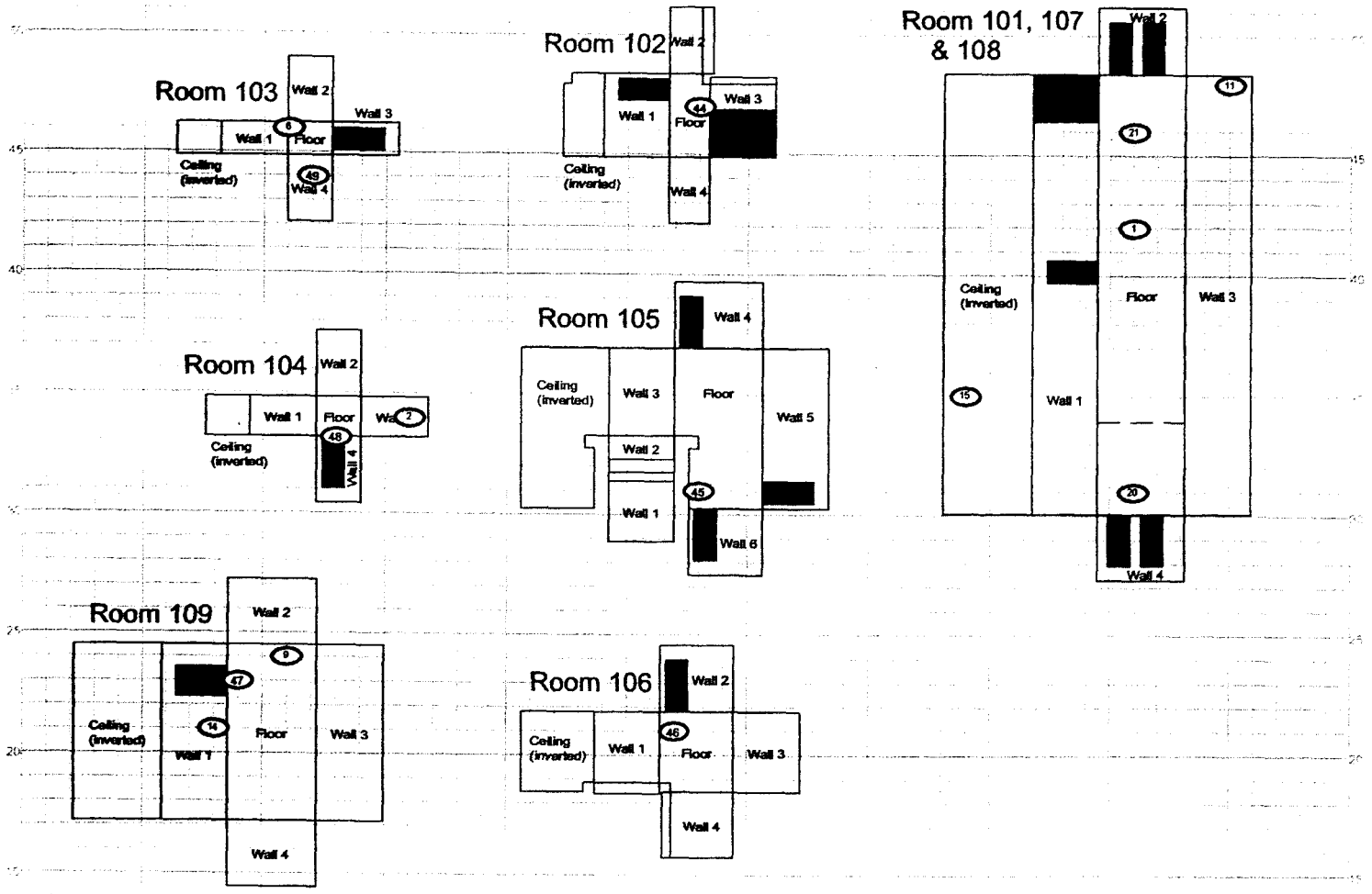
PRE-DEMOLITION SURVEY FOR SECURITY CLUSTER

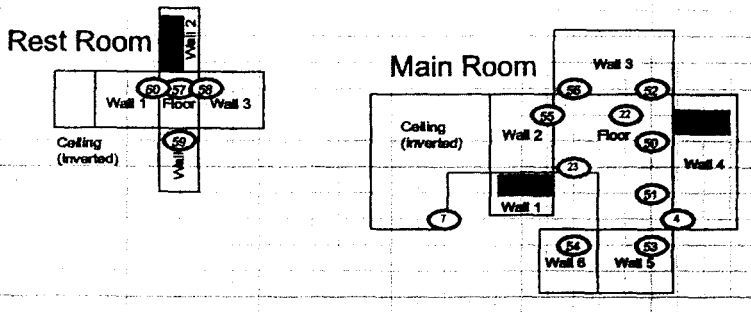
Survey Area: A **Survey Unit: SEC-A-001** **Classification: 3**
Building: 762, 762A, 792, 792A
Survey Unit Description: Interiors
Total Area: 1820 sq. m. **Total Floor Area: 516 sq. m.**

2 Scan Survey Areas

Building 792A



Building 792



SURVEY MAP LEGEND

- Sensor & TSA Location
- Sensor, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s): 9, 10, 11, 26, 21, 27, 31, 32
RCT ID #(s): 75, 8

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: h:\2001\01-0231 March 5, 2001

SEC-A-001

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SURVEY UNIT DATA SUMMARY: SEC-A-002

Survey Unit Descripton:
Interior of 550, 761 and 901

Survey Unit SEC-A-002 Data Summary

Total Surface Activity Measurements

45	45
Number Required	Number Obtained

MIN	-7.7	dpm/100 cm^2
MAX	57.6	dpm/100 cm^2
MEAN	15.9	dpm/100 cm^2
STD DEV	14.1	dpm/100 cm^2
TRANSURANIC $DCGL_W$	100	dpm/100 cm^2

Removable Activity Measurements

45	45
Number Required	Number Obtained

MIN	-0.6	dpm/100 cm^2
MAX	6.1	dpm/100 cm^2
MEAN	0.4	dpm/100 cm^2
STD DEV	1.8	dpm/100 cm^2
TRANSURANIC $DCGL_W$	20	dpm/100 cm^2

Survey Unit SEC-A-002 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9	10	11	12
Serial #:	1254	1366	1254	N/A	N/A	N/A
Cal Due Date:	5/20/01	5/6/01	5/20/01	N/A	N/A	N/A
Analysis Date:	3/20/01	3/20/01	3/20/01	N/A	N/A	N/A
Alpha Eff. (c/d):	0.227	0.204	0.227	N/A	N/A	N/A
Alpha Bkgd (cpm)	2.0	2.0	2.0	N/A	N/A	N/A
Sample Time (min)	1.5	1.5	1.5	N/A	N/A	N/A
LAB Time (min)	1.5	1.5	1.5	N/A	N/A	N/A
MDC (dpm/100cm^2)	32.5	36.2	32.5	N/A	N/A	N/A

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
1	8	5.3	4.0	14.9
2	8	4.0	1.3	8.5
3	8	3.3	2.7	5.1
4	8	10.7	3.3	41.4
5	8	4.0	1.3	8.5
6	8	1.3	1.3	-4.8
7	7	6.0	2.0	16.4
8	7	6.7	2.7	19.5
9	7	8.0	4.0	25.3
10	8	6.0	2.0	18.3
11	8	4.7	7.3	11.9
12	8	7.3	3.3	24.7
13	8	3.3	2.0	5.1
14	7	5.3	1.3	13.4
15	8	2.6	2.0	1.6
16	8	2.7	2.7	2.1
17	7	9.3	2.0	31.0
18	7	1.3	4.0	-4.3
19	7	1.3	2.7	-4.3
20	7	5.3	1.3	13.4
21	8	3.3	2.0	5.1
22	8	9.3	2.0	34.5
23	7	4.7	2.0	10.7
24	8	4.0	1.3	8.5
25	8	6.7	2.7	21.8
26	7	12.0	1.3	42.9
27	7	12.7	3.3	46.0
28	8	14.0	0.7	57.6
29	8	5.3	2.0	14.9
30	7	3.3	0.7	4.5
31	8	3.3	2.7	5.1
32	8	8.0	2.0	28.2
33	7	4.0	3.3	7.6
34	7	6.7	1.3	19.5
35	7	6.0	2.0	16.4
36	7	7.3	3.3	22.2
37	8	7.3	2.0	24.7
38	8	0.7	3.3	-7.7

Survey Unit SEC-A-002 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9	10	11	12
Serial #:	1254	1366	1254	N/A	N/A	N/A
Cal Due Date:	5/20/01	5/6/01	5/20/01	N/A	N/A	N/A
Analysis Date:	3/20/01	3/20/01	3/20/01	N/A	N/A	N/A
Alpha Eff. (c/d):	0.227	0.204	0.227	N/A	N/A	N/A
Alpha Bkgd (cpm)	2.0	2.0	2.0	N/A	N/A	N/A
Sample Time (min)	1.5	1.5	1.5	N/A	N/A	N/A
LAB Time (min)	1.5	1.5	1.5	N/A	N/A	N/A
MDC (dpm/100cm^2)	32.5	36.2	32.5	N/A	N/A	N/A

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
39	8	6.0	1.3	18.3
40	8	6.7	1.3	21.8
41	8	7.3	0.7	24.7
42	8	2.7	2.0	2.1
43	8	4.0	0.7	8.5
45	7	5.3	2.7	13.4
			Average LAB	2.3
			MIN	-7.7
			MAX	**57.6**
			MEAN	**15.9**
			SD	14.1
			Transuranic $DCGL_W$	**100**

QC DATA

QC-23	9	3.3	2.0	5.7
QC-9	9	4.7	3.3	11.9
QC-35	9	8.0	0.7	26.4
			Average LAB	2.0
			MIN	5.7
			MAX	**26.4**
			MEAN	**14.7**
			SD	10.6
			Transuranic $DCGL_W$	**100**

Survey Unit SEC-A-002 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4	5	6
Serial #:	767	833	830	N/A	N/A	N/A
Cal Due Date:	4/11/01	7/23/01	8/12/01	N/A	N/A	N/A
Analysis Date:	3/20/01	3/20/01	3/20/01	N/A	N/A	N/A
Alpha Eff. (c/d):	0.33	0.33	0.33	N/A	N/A	N/A
Alpha Bkgd (cpm)	0.2	0	0.2	N/A	N/A	N/A
Sample Time (min)	2	2	2	N/A	N/A	N/A
Bkgd Time (min)	10	10	10	N/A	N/A	N/A
MDC (dpm/100cm^2)	8.0	4.5	8.0	N/A	N/A	N/A

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	2	0.0	0.0
2	3	0.0	-0.6
3	3	2.0	5.5
4	2	0.0	0.0
5	3	0.0	-0.6
6	2	0.0	0.0
7	2	0.0	0.0
8	1	0.0	-0.6
9	1	1.0	2.4
10	3	0.0	-0.6
11	1	1.0	2.4
12	2	0.0	0.0
13	3	0.0	-0.6
14	3	1.0	2.4
15	3	0.0	-0.6
16	2	0.0	0.0
17	3	0.0	-0.6
18	3	0.0	-0.6
19	1	0.0	-0.6
20	1	0.0	-0.6
21	1	0.0	-0.6
22	1	1.0	2.4
23	2	0.0	0.0
24	1	0.0	-0.6
25	1	0.0	-0.6
26	3	0.0	-0.6
27	2	0.0	0.0
28	1	1.0	2.4
29	1	0.0	-0.6
30	1	0.0	-0.6
31	2	0.0	0.0
32	2	1.0	3.0
33	3	0.0	-0.6
34	1	0.0	-0.6
35	2	2.0	6.1
36	2	0.0	0.0
37	3	0.0	-0.6
38	3	0.0	-0.6
39	3	0.0	-0.6
40	1	0.0	-0.6
41	2	0.0	0.0
42	2	0.0	0.0
43	1	2.0	5.5
44	3	0.0	-0.6
45	2	0.0	0.0
		MIN	-0.6
		MAX	**6.1**
		MEAN	0.4
		SD	1.8
		Transuranic $DCGL_W$	**20**

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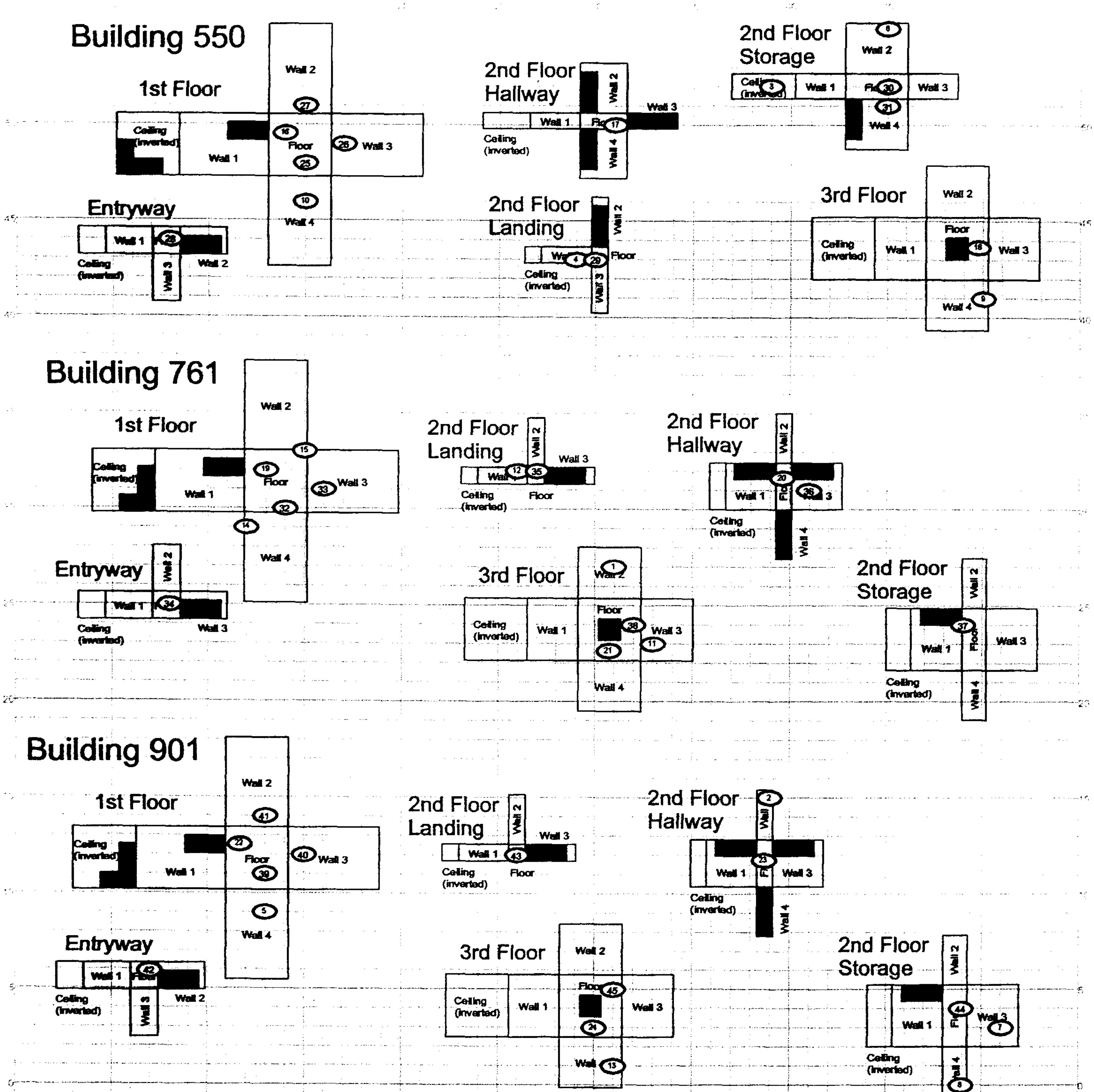
F   DEMOLITION SURVEY FOR SECURITY CLUS   R

Survey Area: A **Survey Unit:** SEC-A-002 **Classification:** 3
Building: 550, 761, 901
Survey Unit Description: Interiors (1st floor < 8 ft.)
Total Area: 661 sq. m. **Total Floor Area:** 86 sq. m.

= Scan survey Areas



SURVEY MAP LEGEND
- Sensor & TSA Location
- Sensor, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

Scan Survey Information
Survey Instrument ID #(s): 7,8,9 7,8,9
RCT ID #(s): 3,4,5

FEET 0 30
METERS 0 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7707 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: fy2001/01-0231 March 6, 2001

SEC-A-002

SURVEY UNIT DATA SUMMARY: SEC-B-003

Survey Unit Descripton:
Exterior of 762, 762A, 792, 792A, 550, 761 and 901

Survey Unit SEC-B-003 Data Summary

Total Surface Activity Measurements

	105	105	
	Number Required	Number Obtained	
MIN	-18.7		dpm/100 cm^2
MAX	96.2		dpm/100 cm^2
MEAN	23.4		dpm/100 cm^2
STD DEV	25.0		dpm/100 cm^2
TRANSURANIC $DCGL_W$	100		dpm/100 cm^2

Removable Activity Measurements

	105	105	
	Number Required	Number Obtained	
MIN	-0.9		dpm/100 cm^2
MAX	9.1		dpm/100 cm^2
MEAN	1.2		dpm/100 cm^2
STD DEV	2.3		dpm/100 cm^2
TRANSURANIC $DCGL_W$	20		dpm/100 cm^2

Survey Unit SEC-B-003 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	8	10	11	12	19
Serial #:	1546	1254	1366	3114	1546	1254
Cal Due Date:	5/3/01	5/20/01	5/6/01	5/6/01	5/3/01	5/20/01
Analysis Date:	3/21/01	3/21/01	3/21/01	3/22/01	3/22/01	3/22/01
Alpha Eff. (c/d):	0.228	0.227	0.204	0.22	0.228	0.227
Alpha Bkgd (cpm)	2.0	0.7	1.3	2.7	2.0	2.0
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	32.3	22.8	31.0	37.5	32.3	32.5

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	21	22	23	24	31	32	33
Serial #:	3114	1546	3114	1546	3114	1546	1241
Cal Due Date:	5/6/01	5/3/01	5/6/01	5/3/01	5/6/01	5/3/01	8/26/01
Analysis Date:	3/23/01	3/23/01	3/26/01	3/26/01	3/27/01	3/27/01	3/28/01
Alpha Eff. (c/d):	0.22	0.228	0.22	0.228	0.220	0.228	0.214
Alpha Bkgd (cpm)	0.7	1.3	2.0	2.0	0.0	0.7	0.7
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	23.5	27.8	33.5	32.3	9.1	22.7	24.2

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
1	12	8.0	2.7	17.1
2	33	2.0	2.7	-9.8
3	33	21.3	10.7	80.4
4	22	7.7	2.7	15.8
5	11	4.0	2.0	-0.5
6	7	14.7	8.7	46.5
7	12	2.0	4.4	-9.2
8	19	4.0	4.7	-0.5
9	21	11.3	6.0	32.7
10	11	7.3	2.7	14.5
11	21	12.0	2.7	35.9
12	33	15.3	2.0	52.3
13	32	5.3	3.3	5.2
14	23	8.0	2.7	17.7
15	10	8.0	2.7	19.1
16	19	14.7	4.0	46.7
17	8	12.0	4.7	34.8
18	8	20.7	7.3	73.1
19	11	0.0	0.7	-18.7
20	12	2.0	3.3	-9.2
21	12	3.3	0.7	-3.5
22	12	4.0	4.7	-0.5
23	11	6.7	2.0	11.8
24	12	4.0	3.3	-0.5
25	11	2.0	1.3	-9.6
26	12	6.7	3.3	11.4
27	11	4.0	2.0	-0.5
28	12	7.3	4.7	14.0
29	11	4.0	2.0	-0.5
30	33	15.3	1.3	52.3
31	33	7.3	2.7	14.9
32	12	2.0	4.7	-9.2
33	11	3.3	1.3	-3.7
34	11	1.4	1.3	-12.3
35	12	9.3	2.7	22.8
36	19	8.0	4.7	17.2
37	11	6.7	2.7	11.8
38	12	5.3	4.0	5.2
39	11	3.3	2.7	-3.7
40	12	4.0	6.0	-0.5
41	11	2.7	3.3	-6.4
42	12	2.7	6.0	-6.2
43	33	16.0	0.7	55.6

Survey Unit SEC-B-003 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	8	10	11	12	19
Serial #:	1546	1254	1366	3114	1546	1254
Cal Due Date:	5/3/01	5/20/01	5/6/01	5/6/01	5/3/01	5/20/01
Analysis Date:	3/21/01	3/21/01	3/21/01	3/22/01	3/22/01	3/22/01
Alpha Eff. (c/d):	0.228	0.227	0.204	0.22	0.228	0.227
Alpha Bkgd (cpm)	2.0	0.7	1.3	2.7	2.0	2.0
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	32.3	22.8	31.0	37.5	32.3	32.5

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	21	22	23	24	31	32	33
Serial #:	3114	1546	3114	1546	3114	1546	1241
Cal Due Date:	5/6/01	5/3/01	5/6/01	5/3/01	5/6/01	5/3/01	8/26/01
Analysis Date:	3/23/01	3/23/01	3/26/01	3/26/01	3/27/01	3/27/01	3/28/01
Alpha Eff. (c/d):	0.22	0.228	0.22	0.228	0.220	0.228	0.214
Alpha Bkgd (cpm)	0.7	1.3	2.0	2.0	0.0	0.7	0.7
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	23.5	27.8	33.5	32.3	9.1	22.7	24.2

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
44	24	6.0	3.3	8.3
45	24	4.7	2.0	2.6
46	23	6.7	2.0	11.8
47	24	12.7	1.3	37.7
48	21	11.3	5.3	32.7
49	23	6.0	4.0	8.6
50	23	5.3	4.0	5.4
51	19	4.0	1.3	-0.5
52	33	22.0	10.7	83.6
53	33	24.7	10.7	96.2
54	22	4.0	0.7	-0.5
55	22	6.7	2.7	11.4
56	21	22.7	4.7	84.5
57	33	21.3	6.7	80.4
58	33	22.3	6.7	85.0
59	33	22.7	7.3	86.9
60	21	4.7	6.0	2.7
61	31	6.0	6.7	8.6
62	22	5.3	4.0	5.2
63	21	12.7	3.3	39.1
64	21	6.7	8.7	11.8
65	21	12.0	6.0	35.9
66	11	9.3	3.3	23.6
67	11	11.3	2.7	32.7
68	12	9.3	2.7	22.8
69	12	8.7	2.0	20.2
70	12	11.3	8.7	31.6
71	11	12.0	4.7	35.9
72	12	8.0	4.7	17.1
73	11	12.7	2.7	39.1
74	12	10.0	2.7	25.9
75	11	5.3	4.7	5.4
76	11	9.3	2.7	23.6
77	11	7.7	3.3	16.3
78	12	12.7	6.0	37.7
79	11	9.3	2.7	23.6
80	7	12.7	3.3	37.7
81	7	8.7	4.0	20.2
82	10	10.7	5.3	32.3
83	10	6.7	6.0	12.7
84	7	8.0	5.3	17.1
85	10	14.7	5.3	51.9
86	10	10.7	6.0	32.3

Survey Unit SEC-B-003 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	8	10	11	12	19
Serial #:	1546	1254	1366	3114	1546	1254
Cal Due Date:	5/3/01	5/20/01	5/6/01	5/6/01	5/3/01	5/20/01
Analysis Date:	3/21/01	3/21/01	3/21/01	3/22/01	3/22/01	3/22/01
Alpha Eff. (c/d):	0.228	0.227	0.204	0.22	0.228	0.227
Alpha Bkgd (cpm)	2.0	0.7	1.3	2.7	2.0	2.0
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	32.3	22.8	31.0	37.5	32.3	32.5

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	21	22	23	24	31	32	33
Serial #:	3114	1546	3114	1546	3114	1546	1241
Cal Due Date:	5/6/01	5/3/01	5/6/01	5/3/01	5/6/01	5/3/01	8/26/01
Analysis Date:	3/23/01	3/23/01	3/26/01	3/26/01	3/27/01	3/27/01	3/28/01
Alpha Eff. (c/d):	0.22	0.228	0.22	0.228	0.220	0.228	0.214
Alpha Bkgd (cpm)	0.7	1.3	2.0	2.0	0.0	0.7	0.7
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	23.5	27.8	33.5	32.3	9.1	22.7	24.2

Sample Location Number	Instrument ID#:	*Sample Gross Counts* (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
87	10	6.7	7.3	12.7
88	10	8.0	4.0	19.1
89	10	17.3	3.3	64.7
90	7	6.7	4.7	11.4
91	10	7.3	4.0	15.7
92	10	6.0	2.7	9.3
93	10	12.0	2.7	38.7
94	7	10.0	7.3	25.9
95	10	13.3	4.0	45.1
96	7	15.3	6.0	49.1
97	10	9.3	2.7	25.5
98	7	9.3	8.0	22.8
99	7	18.0	6.0	60.9
100	10	7.3	2.7	15.7
101	7	6.0	3.3	8.3
102	7	14.7	4.0	46.5
103	7	7.3	4.0	14.0
104	7	9.3	3.3	22.8
105	7	14.0	5.3	43.4
			Average LAB	4.1
			MIN	-18.7
			MAX	**96.2**
			MEAN	**23.4**
			SD	25.0
			Transuranic DCGL$_W$	**100**

QC DATA

QC-2	10	8.7	2.7	20.9
QC-3	10	12.0	1.3	35.9
QC-3	12	13.3	8	40.5
QC-3	19	8.0	7.3	17.2
QC-3	11	6.0	2.7	8.3
QC-10	11	4.0	2.7	-0.5
			Average LAB	4.1
			MIN	-0.5
			MAX	**40.5**
			MEAN	**20.4**
			SD	15.7
			Transuranic DCGL$_W$	**100**

Survey Unit SEC-B-003 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4	5	6	13
Serial #:	830	833	767	**770**	830	833	767
Cal Due Date:	8/12/01	7/23/01	4/11/01	**7/18/01**	8/12/01	7/23/01	4/11/01
Analysis Date:	3/21/01	3/21/01	3/21/01	**3/21/01**	3/21/01	3/21/01	3/23/01
Alpha Eff. (c/d):	0.33	0.33	0.33	**0.33**	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.1	0.2	0.2	**0.1**	0.2	0.0	0.3
Sample Time (min)	2	2	2	**2**	2	2	2
Bkgd Time (min)	10	10	10	**10**	10	10	10
MDC (dpm/100cm^2)	7.0	8.0	8.0	**7.0**	8.0	4.5	8.8

Manufacturer:	Eberline	Eberline	Eberline	**Eberline**	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	**SAC-4**	SAC-4	SAC-4	SAC-4
Instrument ID#:	14	17	18	**25**	26	27	28
Serial #:	770	830	833	**830**	833	1157	770
Cal Due Date:	7/18/01	8/12/01	7/23/01	**8/12/01**	7/23/01	8/27/01	7/18/01
Analysis Date:	3/23/01	3/26/01	3/26/01	**3/29/01**	3/29/01	3/29/01	3/29/01
Alpha Eff. (c/d):	0.33	0.33	0.33	**0.33**	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.2	0	0.1	0.0	0.0	0.0	0.1
Sample Time (min)	2	2	2	**2**	2	2	2
Bkgd Time (min)	10	10	10	**10**	10	10	10
MDC (dpm/100cm^2)	8.0	4.5	7.0	**4.5**	4.5	4.5	7.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	*Net Activity* (dpm/100 cm^2)
1	13	0.0	-0.9
2	28	2.0	5.8
3	26	0.0	0.0
4	14	1.0	2.4
5	6	0.0	0.0
6	1	0.0	-0.3
7	13	1.0	2.1
8	26	0.0	0.0
9	5	1.0	2.4
10	14	1.0	2.4
11	14	0.0	-0.6
12	2	0.0	-0.6
13	17	1.0	3.0
14	25	0.0	0.0
15	1	0.0	-0.3
16	5	0.0	-0.6
17	3	0.0	-0.6
18	4	0.0	-0.3
19	5	0.0	-0.6
20	6	0.0	0.0
21	5	1.0	2.4
22	6	0.0	0.0
23	13	0.0	-0.9
24	14	1.0	2.4
25	15	0.0	0.0
26	6	0.0	0.0
27	5	0.0	-0.6
28	5	0.0	-0.6
29	14	0.0	-0.6
30	3	0.0	-0.6
31	4	0.0	-0.3
32	14	2.0	5.5
33	14	0.0	-0.6
34	5	2.0	5.5
35	13	0.0	-0.9
36	6	0.0	0.0
37	14	0.0	-0.6
38	13	1.0	2.1
39	6	1.0	3.0
40	14	0.0	-0.6
41	5	2.0	5.5
42	13	0.0	-0.9
43	1	2.0	5.8
44	18	0.0	-0.3
45	17	0.0	0.0
46	25	0.0	0.0
47	18	1.0	2.7
48	6	0.0	0.0
49	17	0.0	0.0
50	17	1.0	3.0
51	27	0.0	0.0
52	27	1.0	3.0
53	25	3.0	9.1
54	13	0.0	-0.9
55	6	1.0	3.0
56	5	0.0	-0.6
57	28	1.0	2.7
58	25	2.0	6.1
59	26	1.0	3.0
60	5	0.0	-0.6
61	18	1.0	2.7
62	6	1.0	3.0
63	13	2.0	5.2
64	14	1.0	2.4
65	13	0.0	-0.9
66	5	0.0	-0.6
67	14	0.0	-0.6
68	13	1.0	2.1
69	6	0.0	0.0
70	5	0.0	-0.6

46

Survey Unit SEC-B-003 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4	5	6	13
Serial #:	830	833	767	**770**	830	833	767
Cal Due Date:	8/12/01	7/23/01	4/11/01	**7/18/01**	8/12/01	7/23/01	4/11/01
Analysis Date:	3/21/01	3/21/01	3/21/01	**3/21/01**	3/21/01	3/21/01	3/23/01
Alpha Eff. (c/d):	0.33	0.33	0.33	**0.33**	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.1	0.2	0.2	**0.1**	0.2	0.0	0.3
Sample Time (min)	2	2	2	**2**	2	2	2
Bkgd Time (min)	10	10	10	**10**	10	10	10
MDC (dpm/100cm^2)	7.0	8.0	8.0	**7.0**	8.0	4.5	8.8

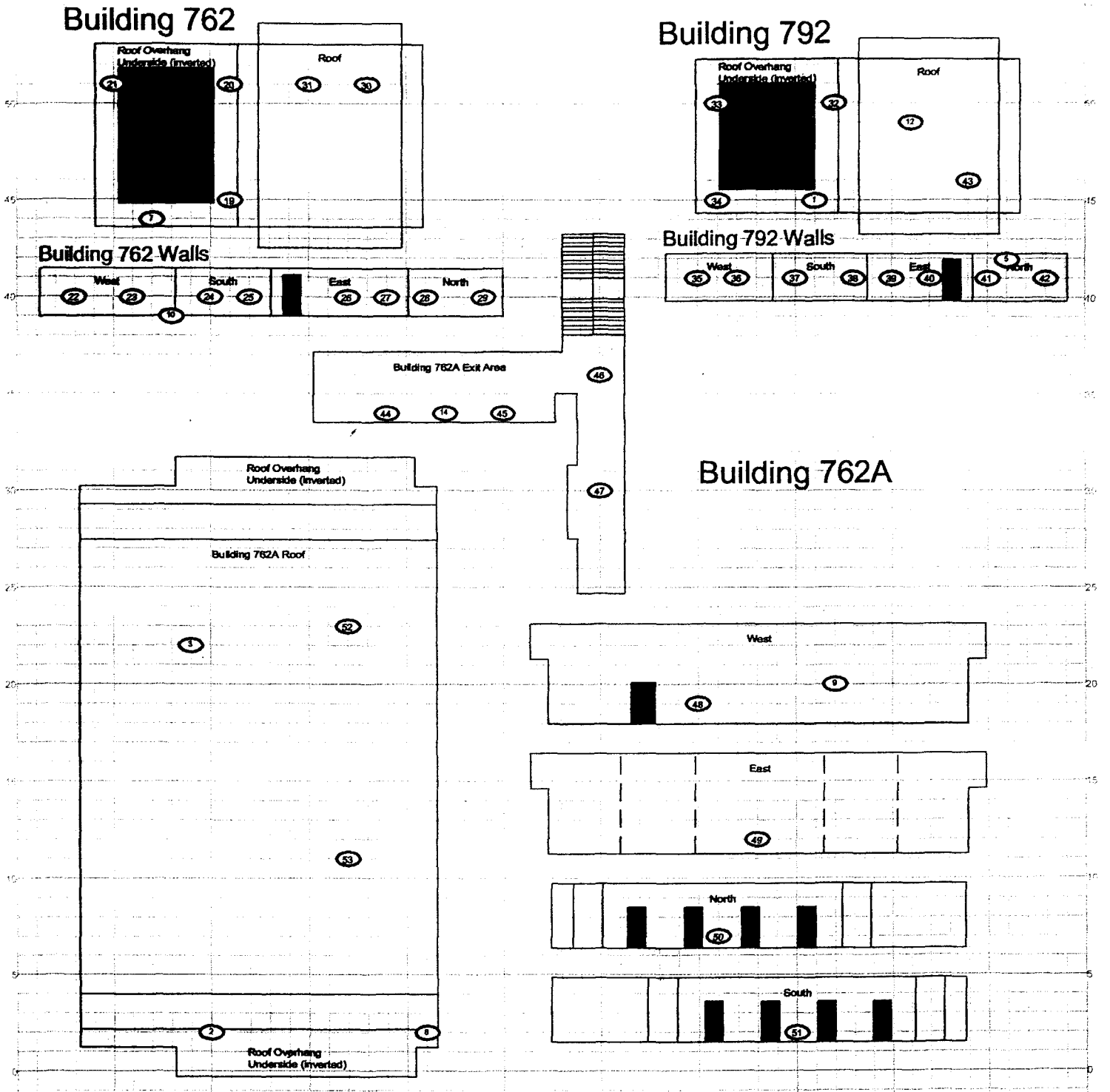
Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	**SAC-4**	SAC-4	SAC-4	SAC-4
Instrument ID#:	14	17	18	**25**	26	27	28
Serial #:	770	830	833	**830**	833	1157	770
Cal Due Date:	7/18/01	8/12/01	7/23/01	**8/12/01**	7/23/01	8/27/01	7/18/01
Analysis Date:	3/23/01	3/26/01	3/26/01	**3/29/01**	3/29/01	3/29/01	3/29/01
Alpha Eff. (c/d):	0.33	0.33	0.33	**0.33**	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.2	0	0.1	0.0	0.0	0.0	0.1
Sample Time (min)	2	2	2	**2**	2	2	2
Bkgd Time (min)	10	10	10	**10**	10	10	10
MDC (dpm/100cm^2)	8.0	4.5	7.0	**4.5**	4.5	4.5	7.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
71	5	2.0	5.5
72	13	0.0	-0.9
73	14	2.0	5.5
74	5	0.0	-0.6
75	14	0.0	-0.6
76	6	0.0	0.0
77	6	0.0	0.0
78	13	0.0	-0.9
79	6	1.0	3.0
80	3	1.0	2.4
81	4	0.0	-0.3
82	1	0.0	-0.3
83	4	0.0	-0.3
84	2	1.0	2.4
85	3	0.0	-0.6
86	2	0.0	-0.6
87	2	1.0	2.4
88	2	1.0	2.4
89	1	0.0	-0.3
90	3	2.0	5.5
91	4	0.0	-0.3
92	1	0.0	-0.3
93	1	1.0	2.7
94	2	0.0	-0.6
95	3	0.0	-0.6
96	4	2.0	5.8
97	2	0.0	-0.6
98	3	0.0	-0.6
99	4	0.0	-0.3
100	2	0.0	-0.6
101	1	0.0	-0.3
102	1	1.0	2.7
103	2	1.0	2.4
104	3	1.0	2.4
105	4	2.0	5.8
		MIN	-0.9
		MAX	**9.1**
		MEAN	1.2
		SD	2.3
		Transuranic DCGL$_W$	**20**

PRE-DEMOLITION SURVEY FOR SECURITY CLUSTER

Survey Area: B **Survey Unit:** SEC-B-003 **Classification:** 3
Building: 762, 762A, 792, 792A, 550, 761, 901
Survey Unit Description: Exteriors
Total Area: 2613 sq. m. **Total Floor Area:** 137 sq. m.

= Scan Survey Areas



SURVEY MAP LEGEND
- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7767 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: fy2001#1-0221 March 5, 2001

Scan Survey Information
Survey Instrument ID #(s): 7, 9, 10, 32, 8, 20
RCT ID #(s): 3, 4, 5, 16

SEC-B-003

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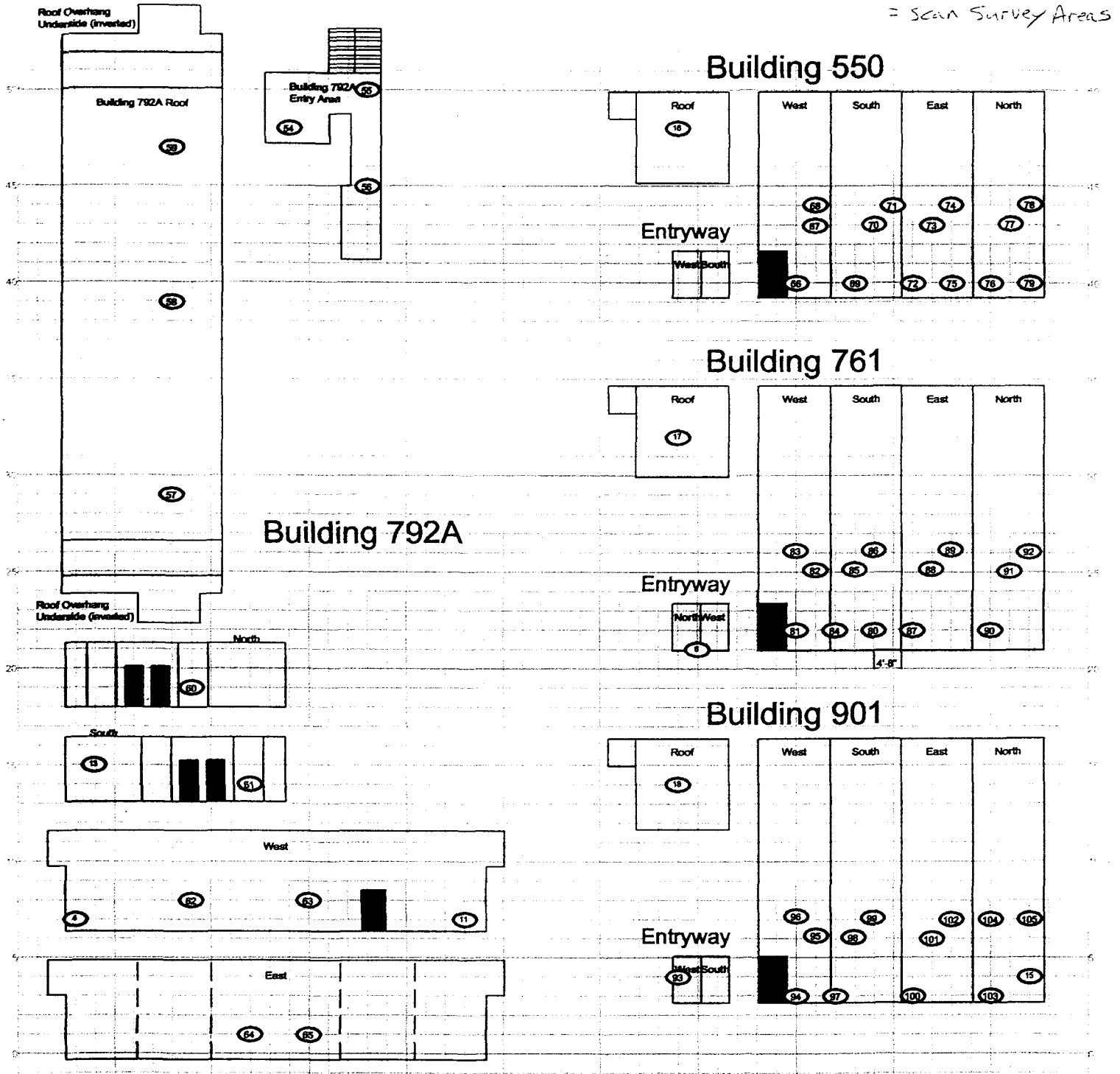
PRE-DEMOLITION SURVEY FOR SECURITY CLUSTER

Survey Area: B **Survey Unit:** SEC-B-003 **Classification:** 3
Building: 762, 762A, 792, 792A, 550, 761, 901
Survey Unit Description: Exteriors
Total Area: 2613 sq. m. **Total Floor Area:** 137 sq. m.

= Scan Survey Areas



SURVEY MAP LEGEND

- Sensor & TSA Location
- Sensor, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s): 7, 9, 16, 32, 8, 20
RCT ID #(s): 3, 4, 5, 6

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept, 303-966-7767 Prepared for:
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THE ART OF TECHNOLOGY
MAP ID: fy2001/01-0231 March 5, 2001

SEC-B-003

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ATTACHMENT E

Chemical Data Summaries and Sample Maps

9.1..1.1.1.1 Asbestos Data Summary

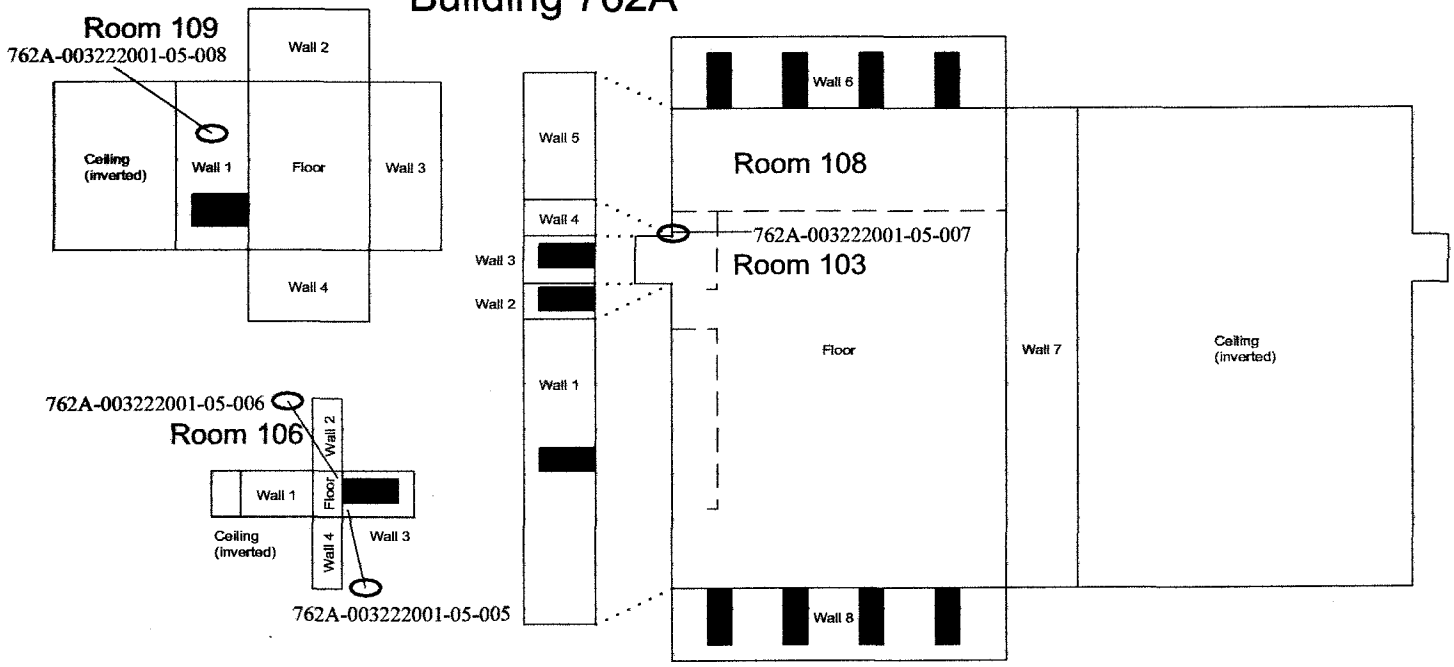
Sample Number	Material Sampled & Location	Analytical Results
762A-03222001-05-001	762A, 2' x 2' white ceiling tile with small groove & random dot – bathroom	Not Detected
762A-03222001-05-002	762A, 2' x 2' white ceiling tile with small groove & random dot – bathroom	Not Detected
762A-03222001-05-003	762A, Drywall & tape joint compound – bathroom	Not Detected
762A-03222001-05-004	762A, Beige linoleum – bathroom	Not Detected
762A-03222001-05-005	762A, Brown base cove with mastic (drywall paper stuck to sample) – janitor's closet	Not Detected
762A-03222001-05-006	762A, Beige linoleum – room 106	Not Detected
762A-03222001-05-007	762A, Drywall mud only – room 103	Not Detected
762A-03222001-05-008	762A, Drywall & tape joint compound – room 109	Not Detected
792A-03192001-05-001	792A, 2' x 2' white ceiling tile with large groove & random dot – janitor's closet	Not Detected
792A-03192001-05-002	792A, Yellow linoleum – janitor's closet	Not Detected
792A-03192001-05-003	792A, Yellow linoleum – janitor's closet	Not Detected
792A-03192001-05-004	792A, Base cove with yellow mastic (drywall paper stuck to sample) – janitor's closet	Not Detected
792A-03192001-05-005	792A, Drywall & tape joint compound – janitor's closet	Not Detected
792A-03192001-05-006	792A, Drywall & tape joint compound – entrance to janitor's closet	Not Detected
792A-03192001-05-007	792A, 2' x 2' white ceiling tile with large groove & random dot – bathroom	Not Detected
792A-03192001-05-008	792A, Caulk on exterior ducts (red painted beige) – exterior ducts on west side	Not Detected
792A-03192001-05-009	792A, Beige exterior sheeting with styrofoam beneath – exterior, west center	Not Detected
792A-03192001-05-010	792A, Beige exterior sheeting with styrofoam beneath – exterior, west side, south end	Not Detected
792A-03192001-05-011	792A, Beige exterior sheeting with styrofoam beneath – exterior, west side, north end	Not Detected
792-03202001-05-001	792, 2' x 2' white ceiling tile with small groove & random dot – bathroom	Not Detected
792-03202001-05-002	792, 2' x 2' white ceiling tile with small groove & random dot – bathroom	Not Detected
792-03202001-05-003	792, Drywall and tape joint compound – main doorway entrance	Not Detected
792-03202001-05-004	792, Drywall and tape joint compound – bathroom	Not Detected
792-03202001-05-005	792, Black base cove and mastic – bathroom entrance	Not Detected
792-03202001-05-006	792, Drywall and tape joint compound – exterior soffit on south end	Not Detected
901-03012001-05-001	901, Drywall and tape joint compound – SW corner	Not Detected
901-03012001-05-002	901, Drywall & tape joint compound – East wall	Not Detected
901-03012001-05-003	901, Drywall & tape joint compound – West wall	Not Detected
901-03012001-05-004	901, Brown base cove mastic – SE corner	Not Detected
901-03012001-05-005	901, Brown base cove mastic – NW corner	Not Detected
901-03012001-05-006	901, Roof core sample – West end	Not Detected

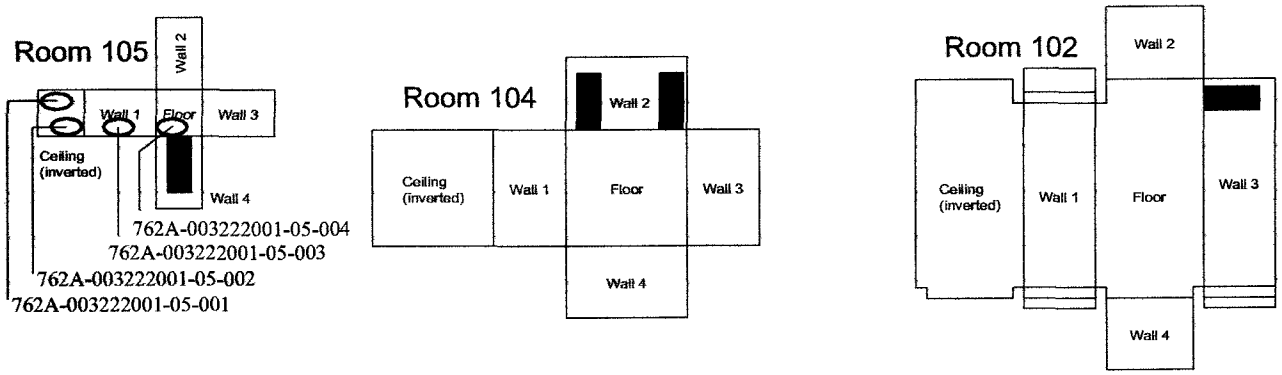
Sample Number	Material Sampled & Location	Analytical Results
901-03012001-05-006	901, Roof core sample – West end	Not Detected
901-03012001-05-007	901, Roof core sample – center	Not Detected
550-03012001-05-001	550, Drywall & tape joint compound – West wall	Not Detected
550-03012001-05-002	550, Drywall & tape joint compound – South wall	Not Detected
550-03012001-05-003	550, Drywall & tape joint compound – North wall	Not Detected
550-03012001-05-004	550, Brown base cove mastic – South wall	Not Detected
550-03012001-05-005	550, Gray window caulk – South window	Not Detected
550-03012001-05-006	550, Roof core sample	Not Detected
550-03012001-05-007	550, Roof core sample	Not Detected
761-03012001-05-001	761, Drywall & tape joint compound – North wall	Not Detected
761-03012001-05-002	761, Drywall & tape joint compound – East wall	Not Detected
761-03012001-05-003	761, Drywall & tape joint compound – West wall	Not Detected
761-03012001-05-004	761, Brown base cove mastic – Northeast corner	Not Detected
761-03012001-05-005	761, Gray window caulk – Southeast corner	Not Detected
761-03012001-05-006	761, Roof core sample	Not Detected
761-03012001-05-007	761, Roof core sample	Not Detected
762-03282001-05-001	762, Roof flashing core sample	60% chrysotile in felt; 20% chrysotile in tar
762-03282001-05-002	762, Roof core sample	Trace chrysotile – point count trace

PRE-DEMOLITION SURVEY FOR SECURITY CLUSTER

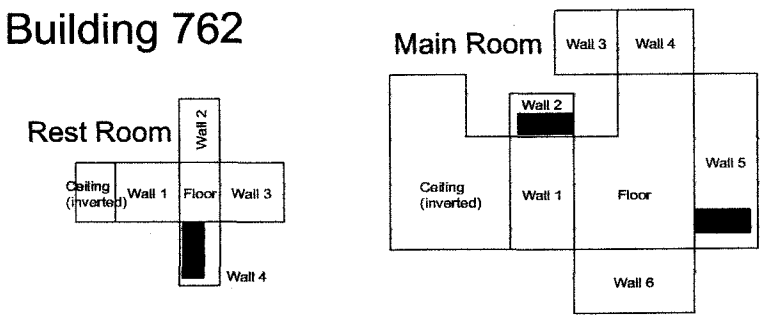
Survey Area: A **Survey Unit: SEC-A-001** **Classification: N/A**
Building: 762, 762A, 792, 792A
Survey Unit Description: Interiors
Total Area: 1820 sq. m. **Total Floor Area: 516 sq. m.**

Building 762A





Building 762



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location

Open/Inaccessible Area
Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

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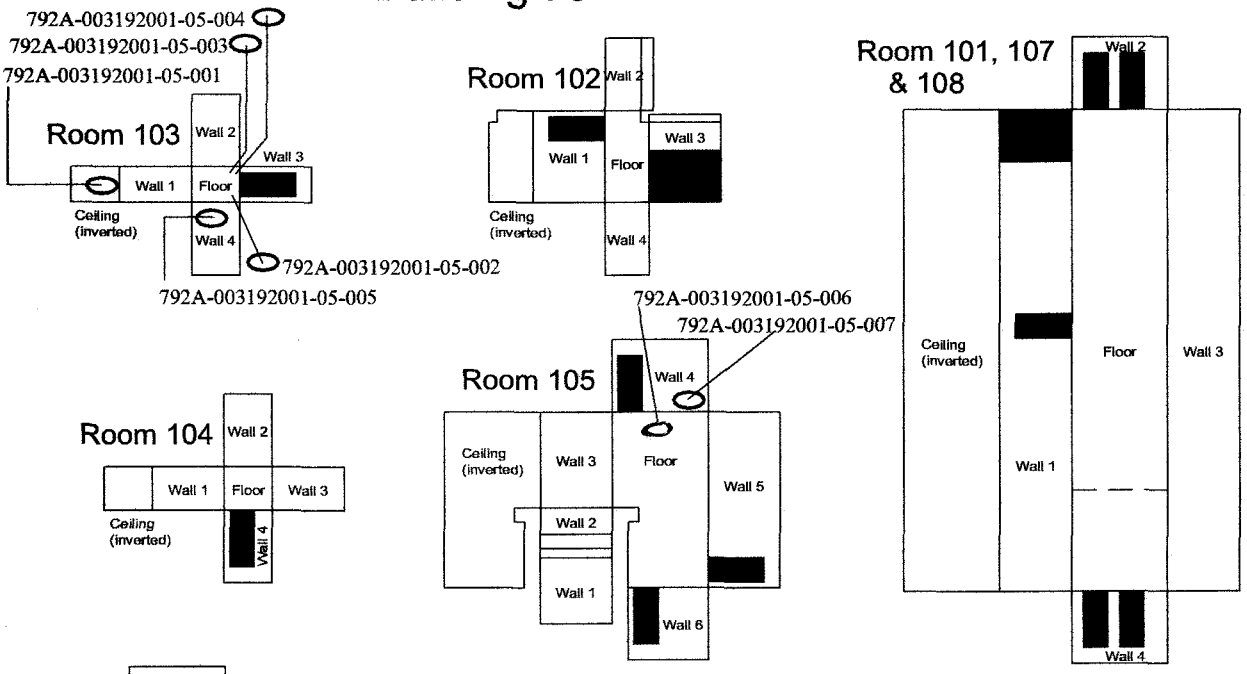
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp THE ART OF TECHNOLOGY
KAISER HILL
MAP ID: fy2001/01-0231 March 5, 2001

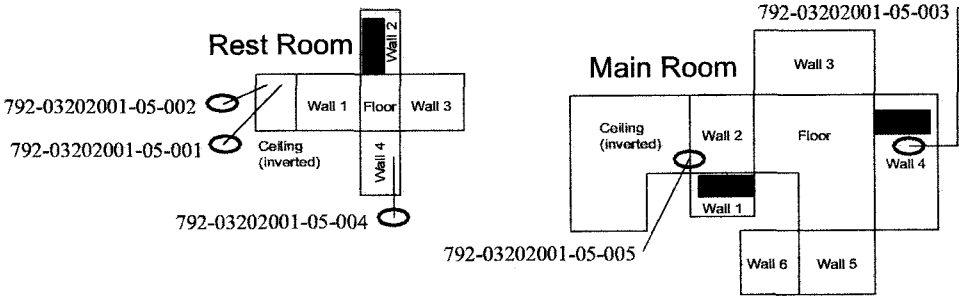
PRE-DEMOLITION SURVEY FOR SECURITY CLUSTER

Survey Area: A **Survey Unit: SEC-A-001** **Classification: N/A**
Building: 762, 762A, 792, 792A
Survey Unit Description: Interiors
Total Area: 1820 sq. m. **Total Floor Area: 516 sq. m.**

Building 792A



Building 792



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
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KAISER HILL
MAP ID: fy2001/01-0231 March 5, 2001

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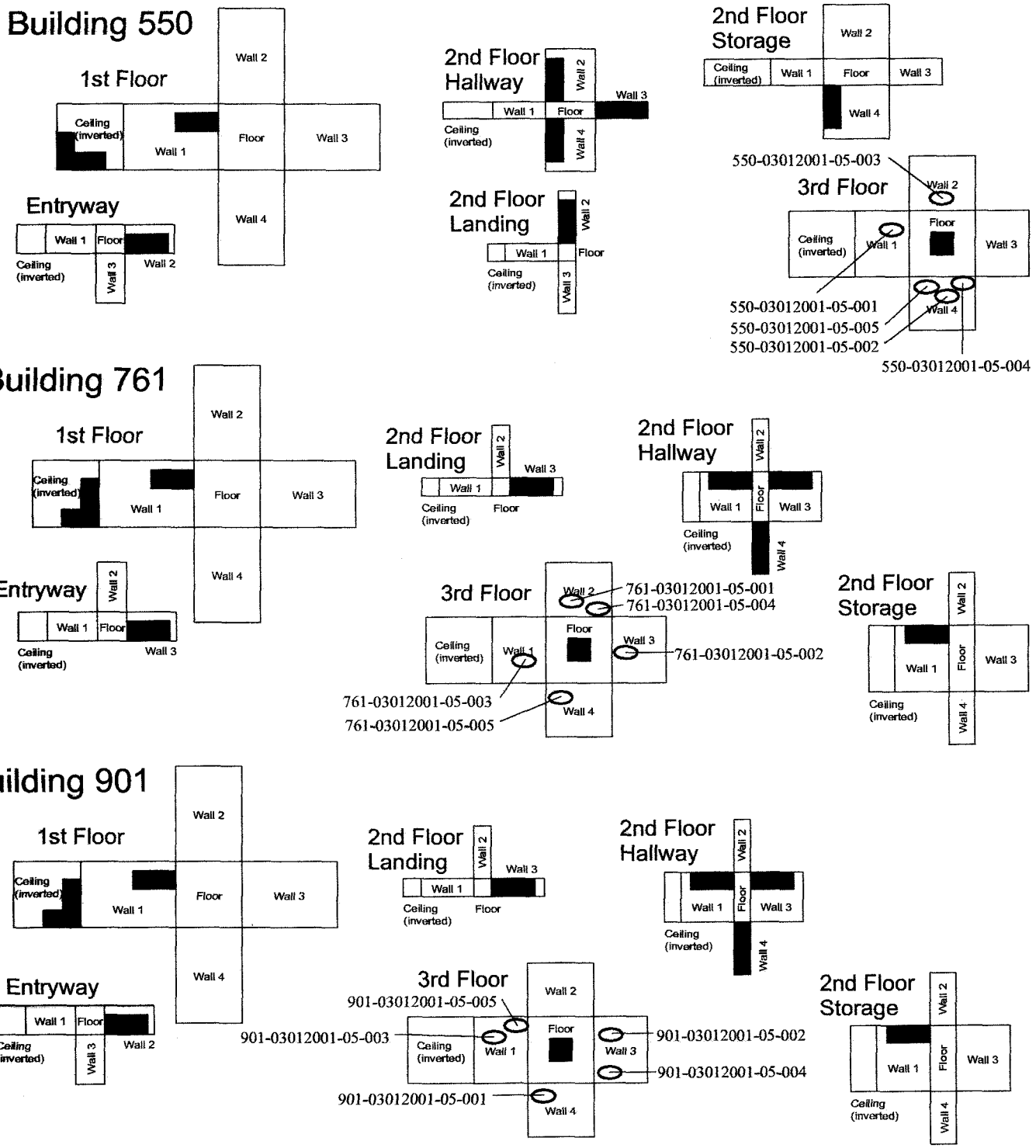
PRE-DEMOLITION SURVEY FOR SECURITY CLUSTER

Survey Area: A **Survey Unit: SEC-A-002** **Classification: N/A**
Building: 550, 761, 901
Survey Unit Description: Interiors (1st floor < 8 ft.)
Total Area: 661 sq. m. **Total Floor Area: 86 sq. m.**



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
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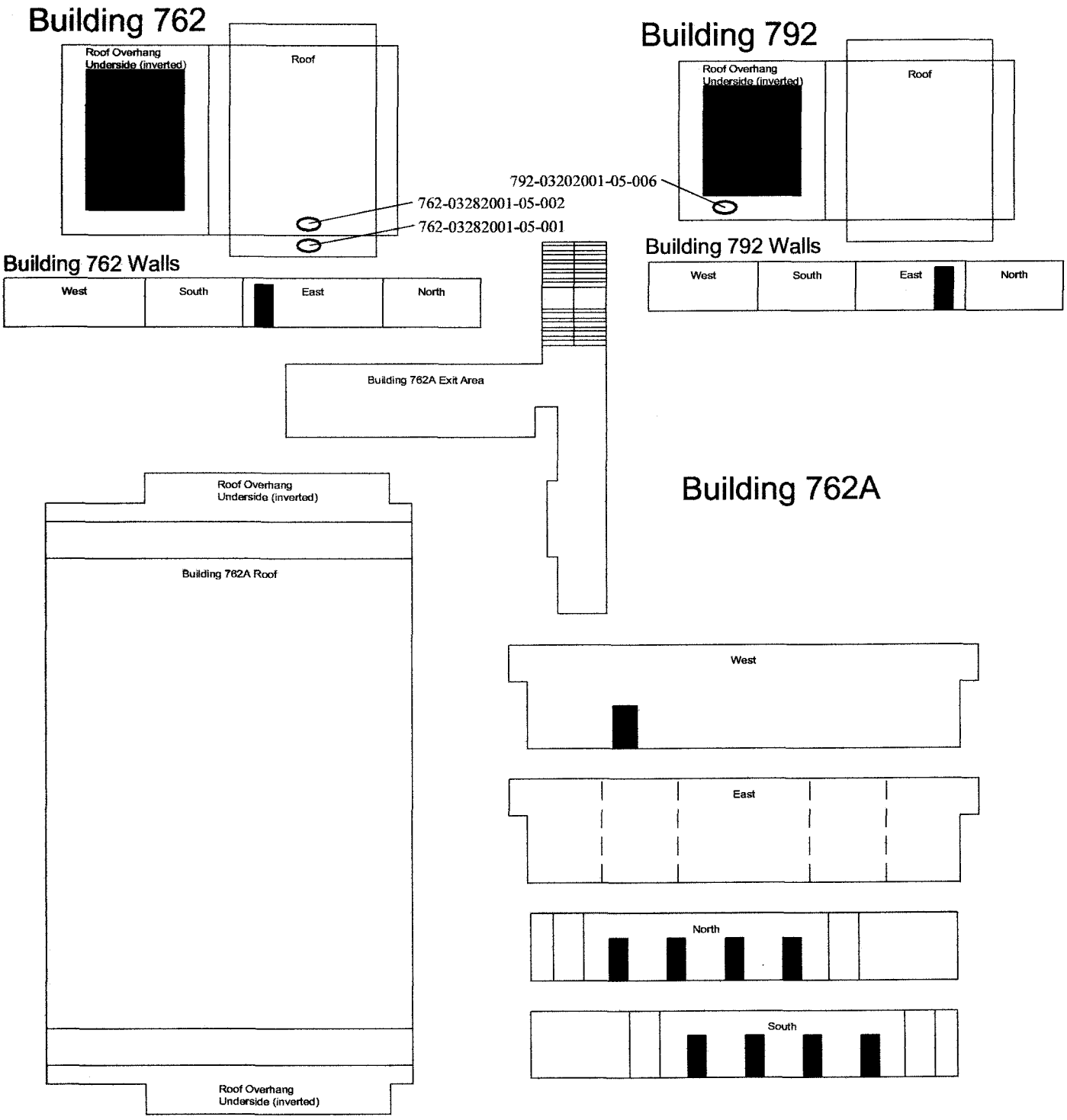
MAP ID: fy2001/01-0231 March 5, 2001

PRE-DEMOLITION SURVEY FOR SECURITY CLUSTER

Survey Area: B **Survey Unit: SEC-B-003** **Classification: N/A**
Building: 762, 762A, 792, 792A, 550, 761, 901
Survey Unit Description: Exteriors
Total Area: 2613 sq. m. **Total Floor Area: 137 sq. m.**



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

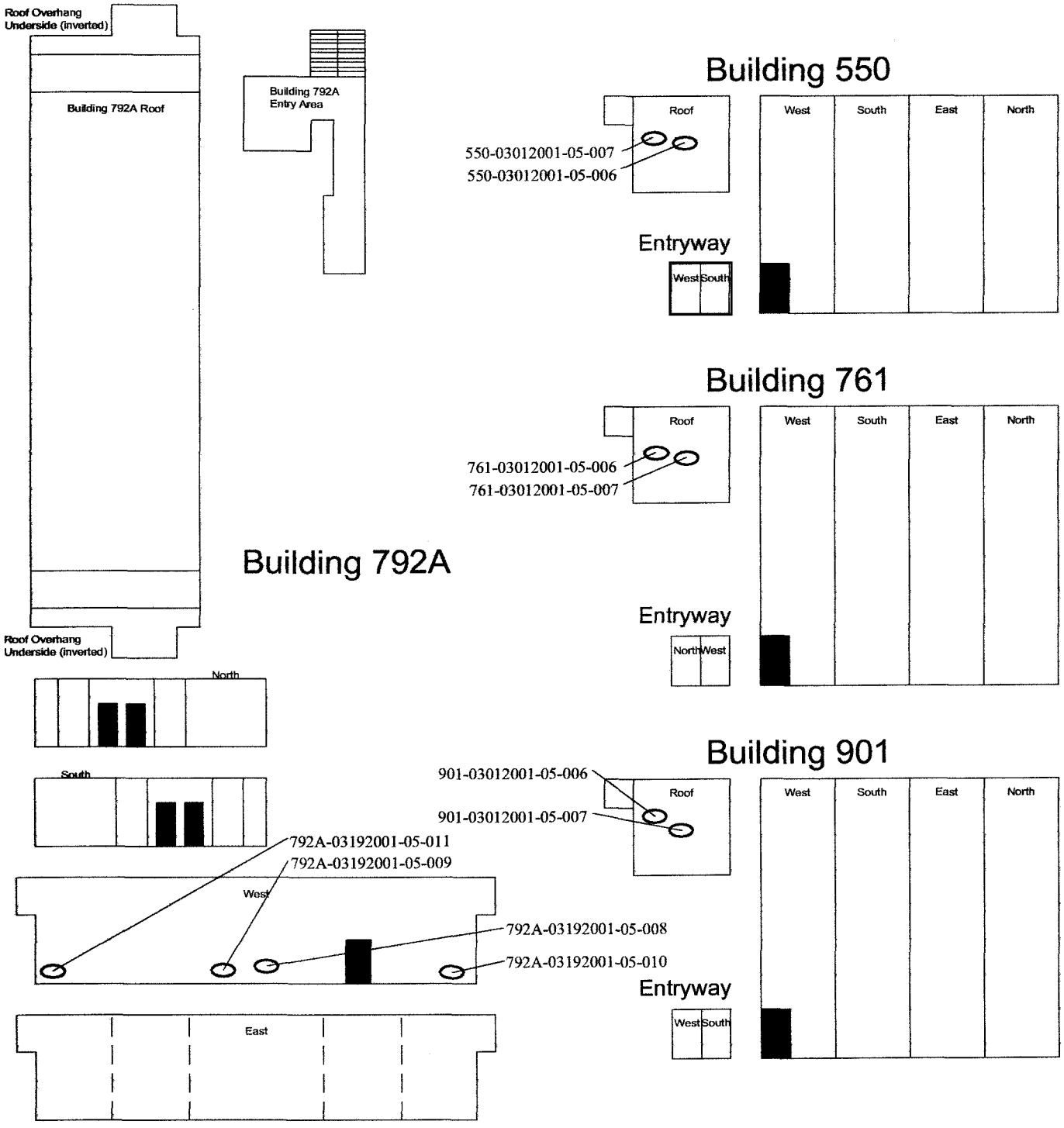
N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp THE ART OF TECHNOLOGY
KAISER HILL
MAP ID: fy2001/01-0231 March 5, 2001

PRE-DEMOLITION SURVEY FOR SECURITY CLUSTER

Survey Area: B **Survey Unit: SEC-B-003** **Classification: N/A**
Building: 762, 762A, 792, 792A, 550, 761, 901
Survey Unit Description: Exteriors
Total Area: 2613 sq. m. **Total Floor Area: 137 sq. m.**



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
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Prepared by: GIS Dept. 303-966-7701 Prepared for:
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KAISER HILL
MAP ID: fy2001/01-0231 March 5, 2001

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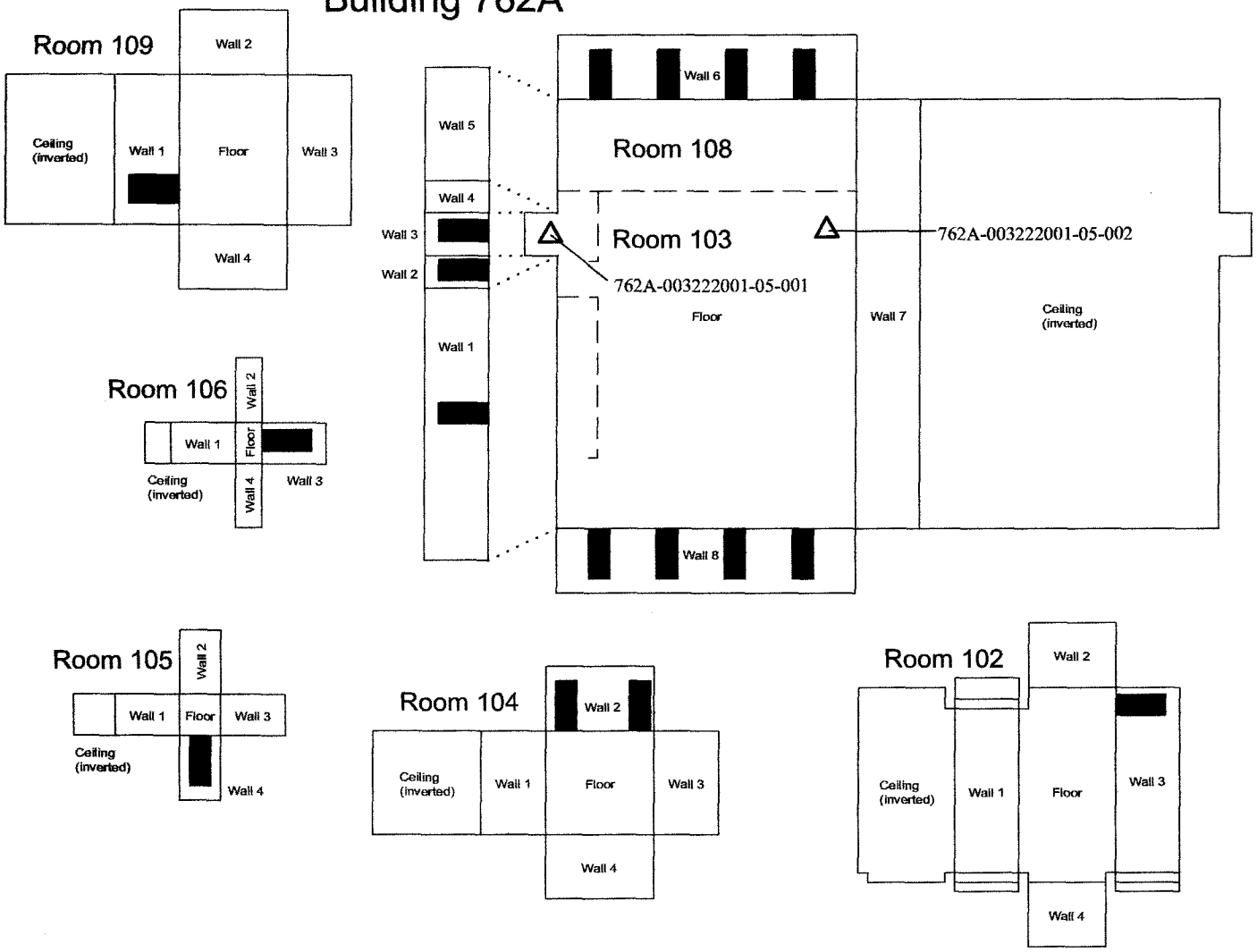
Beryllium Data Summary

Sample Number	Sample Location	Result ($ug/100\ cm^2$)
901-03132001-05-001	901, Doorway of first floor	< 0.1
901-03132001-05-002	901, Window sill on third floor	< 0.1
761-03132001-05-001	761, Doorway of first floor	< 0.1
761-03132001-05-002	761, Landing on second floor	< 0.1
761-03132001-05-003	Field Blank	< 0.1
761-03132001-05-004	Field Blank	< 0.1
550-03132001-05-001	550, Doorway of first floor	< 0.1
550-03132001-05-002	550, Landing on second floor	< 0.1
762A-03222001-05-001	762A, Entrance to utility closet	< 0.1
762A-03222001-05-002	762A, East security turnstile	< 0.1
762-03222001-05-001	762, Bathroom	< 0.1
762-03222001-05-002	762, On top of radiator – east wall	< 0.1
792-03202001-05-001	792, Bathroom	< 0.1
792-03202001-05-002	792, Top of electrical panel	< 0.1
792A-03222001-05-001	792A, North doorway	< 0.1
792A-03222001-05-002	792A, South doorway	< 0.1

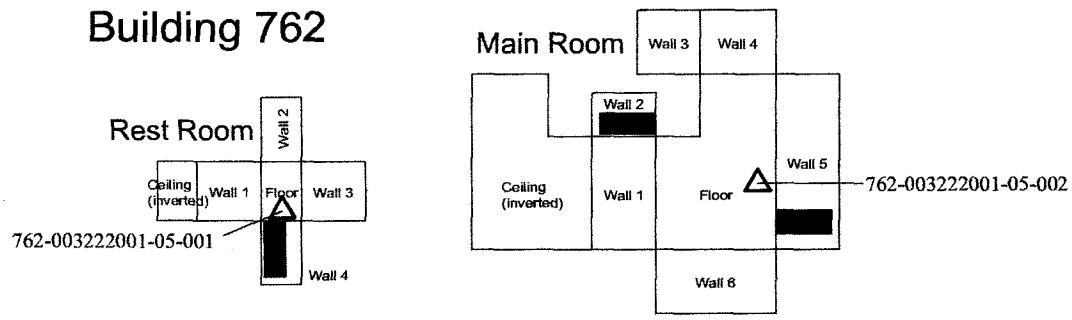
PRE-DEMOLITION SURVEY FOR SECURITY CLUSTER

Survey Area: A **Survey Unit: SEC-A-001** **Classification: N/A**
Building: 762, 762A, 792, 792A
Survey Unit Description: Interiors
Total Area: 1820 sq. m. **Total Floor Area: 516 sq. m.**

Building 762A



Building 762



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location

Open/Inaccessible Area
Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

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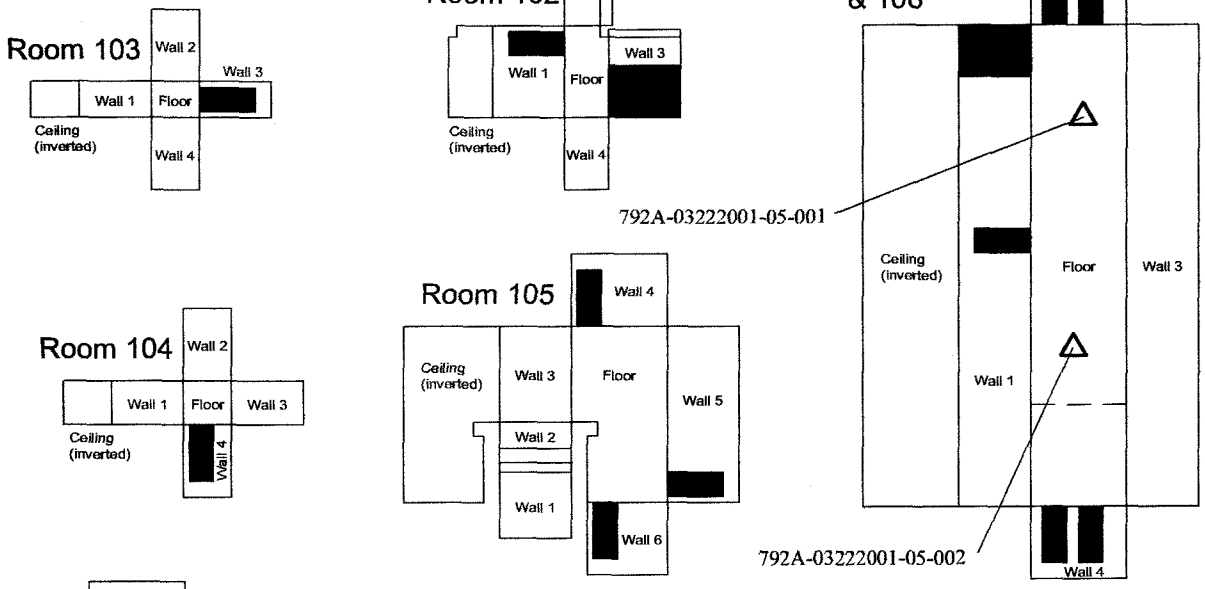
THE ART OF TECHNOLOGY
KAISER HILL
MAP ID: fy2001/01-0231
March 5, 2001

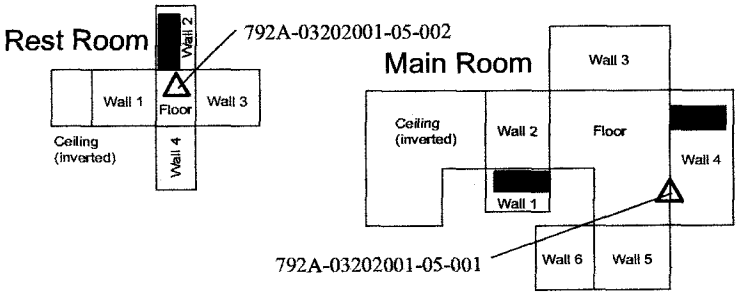
PRE-DEMOLITION SURVEY FOR SECURITY CLUSTER

Survey Area: A **Survey Unit: SEC-A-001** **Classification: N/A**
Building: 762, 762A, 792, 792A
Survey Unit Description: Interiors
Total Area: 1820 sq. m. **Total Floor Area: 516 sq. m.**

Building 792A



Building 792



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location

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Open/Inaccessible Area
Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
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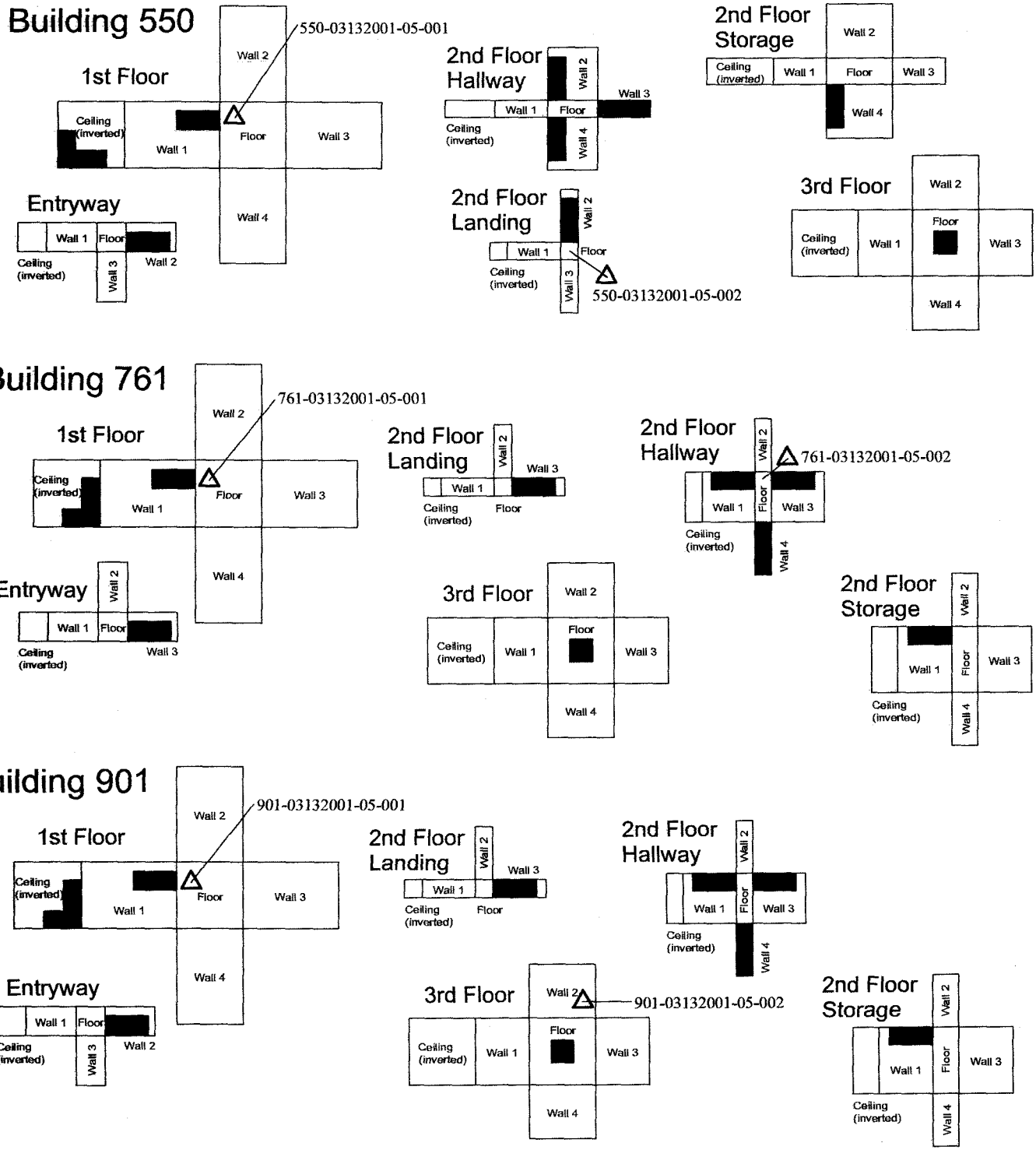
THE ART OF TECHNOLOGY
KAISER HILL
MAP ID: fy2001/01-0231 March 5, 2001

PRE-DEMOLITION SURVEY FOR SECURITY CLUSTER

Survey Area: A **Survey Unit: SEC-A-002** **Classification: N/A**
Building: 550, 761, 901
Survey Unit Description: Interiors (1st floor < 8 ft.)
Total Area: 661 sq. m. **Total Floor Area: 86 sq. m.**



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCBS Sample Location

Open/Inaccessible Area
Area in Another Survey Unit

N

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp THE ART OF TECHNOLOGY
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ATTACHMENT F

Decommissioning Waste Types and Volume Estimates

Attachment F – Decommissioning Waste Types and Volumes Estimates

Facility	Concrete[1] (cu ft)	Wood[1] (cu ft)	Metal[1] (cu ft)	Corrugated/ Sheet Metal[1] (cu ft)	Wall Board[1] (cu ft)	ACM (sq. ft)	Other Waste (cu ft)
550	1,874	None	75	None	4	None	Glass – 67 Insulation – 75
761	2121	None	100	None	4	None	Glass – 67 Insulation – 75
901	2121	None	100	None	4	None	Glass – 67 Insulation – 75
762	1069	None	5	None	50	Roof Flashing - 193	Glass – 20 Insulation – 311 Acoustical Tile – 24
762A	6929	None	1500	None	410	None	Glass – 15 Ridged Insulation – 1211 Fiberglass Insulation – 1687 Acoustical Tile – 203 Raised Floor Panels – 52
792	896	None	5	None	44	Roof Flashing - 193	Glass – 20 Insulation – 272 Acoustical Tile – 20
792A	3118	None	675	None	185	None	Glass – 7 Ridged Insulation – 545 Fiberglass Insulation – 759 Acoustical Tile – 91

(1) Materials are assumed to be PCB Bulk Product Waste.

ATTACHMENT G

Data Quality Assessment (DQA) Summary Tables

Table G-1. Sampling & Analysis Completeness Summary

ANALYTE	# Samples Required (incl. Media; Real & QC Samples)	# Taken (Real & QC Samples)[B]	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Asbestos[A]	(biased/reals)			40 CFR 763.86
• Bldg 550	10	5 (int) 2 (ext)	None	5 CCR 1001-10
• Bldg 761	10	5 (int) 2 (ext)	none	EPA 600/R-93/116
• Bldg 901	10	5 (int) 2 (ext)	none	("none" is <1% by volume)
• Bldg 762	11	2 (ext)	ACM	
• Bldg 792	11	5 (int) 1 (ext)	ACM (762 inference)	
• Bldg 762A	24	8 (int)	None	
• Bldg 792A	24	7 (int) 4 (ext)	none	
Beryllium (swipes)	14 (total, biased, reals)	14 reals, 2 blanks	No contamination at any location	RIN 01D0630
• Bldg 550	2	2		OSHA ID-125G
• Bldg 761	2	2		No results above action level (0.2μg/100cm^2) or investigative level (0.1 μg/100cm^2).
• Bldg 901	2	2		
• Bldg 762	2	2		
• Bldg 792	2	2		
• Bldg 762A	2	2		
• Bldg 792A	2	2		
Radiological				
• Survey Unit: SEC-A-001	60 TSA & Smears (random + biased) 3 QC TSA 10% Scan	60 TSA & Smears (random + biased) 3 QC TSA 10% Scan	No contamination at any location above the action levels	No results above $DCGL_W$ or $DCGL_{EMC}$ action level (20 dpm/100cm^2 removable, 100 dpm/100cm^2 average, and 300 dpm/100cm^2 maximum.
• Survey Unit: SEC-A-002	45 TSA & Smears (random + biased) 3 QC TSA 10% Scan	45 TSA & Smears (random + biased) 3 QC TSA 10% Scan		
• Survey Unit: SEC-B-003	105 TSA & Smears (random + biased) 6 QC TSA 10% Scan	105 TSA & Smears (random + biased) 6 QC TSA 10% Scan		

[A] # of samples required is estimate only, based on miscellaneous material types; final # of samples at discretion of IH

[B] int – building interior, ext – building exterior

Table G-2, Security Cluster, PDS Compliance with MARSSIM Data Quality Guidelines.

Security Cluster RLCR	MARSSIM sec 4.9	QAPP	SOPs	Training & Quals (personnel)	calibrations	QC Samples	sample quantities (adequacy of)	precision	MARSSIM sec 8.2	Reviews - DQOs & Sampling Design	"prelim" data review	graphical data review	conclusions	MARSSIM sec 9.0	Reports (to decision makers)	site description	analytical methods & MDA/MDC	backgroud radiation	measurement results	Chain-of-Custody	SOPs	Quality records	results by geographic location	defined level of data review	data quality indicators (PARCCS)	QC measurements	MARSSIM Appdx E (DQA)	review DQOs & survey design	draw conclusions	MARSSIM Appdx N	raw data, original data forms	QA assessments/NCRs/CARs	data reduction/calculations	method validation	historical data
Inventory of Report & Project File	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X
Reconnaissance-Level Characterization Rpt														X	X							X		X					X						
Executive Summary												X		X				X							X			X	X						
Sec 1.0 Introduction									X																										
Sec 3.0 Radiological Hazards																													X						
Attach. G Data Quality Assessment						X	X		X		X	X					X								X			X	X		X		X		
Attach. A , B, & D (Survey Results, Maps, Data)																		X			X	X													
Radiological Characterization Package			X																																X
Survey Packages SEC-A-001, -002, & -003														X						X	X													X	
Summary Package Cover Sheets																		X			X		X												
(MARSSIM) PreSurvey Calculation Worksheets					X												X				X													X	
Sampling & Survey Instructions		X																			X														
Total Surface Activity Data Sheets					X												X				X				X				X						
Removable Contamination Sheets																	X				X				X										
Instrument Data Sheets																	X				X														
Survey Signatures										X	X										X														
Grid Survey Maps											X										X	X													
(MARSSIM) PostSurvey Verification worksheets						X															X										X			
Lab Results (not applicable)																																			
Chain-of-Custody						X													X		X								X						
Programmatic QA Records															X						X														
Calibrations & Reference (Source) Standards				X											X						X														
Sensitivity (MDC) determinations															X					X	X														
Periodic Performance Checks				X											X		X			X	X				X				X						
DDCP/RLCP/PDSP	X																																		